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THESIS

ENERGIZING THE ENTERPRISE: AN INCENTIVE-BASED APPROACH TO HOMELAND SECURITY

by

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ABSTRACT

The key message for the homeland security enterprise in the 2010 *National Security Strategy* is that homeland security "is not simply about government action alone, but rather about the collective strength of the entire country." Based, in part, on sheer numbers, but mostly on its ability to touch every aspect of every life in every location, the American population is simply unmatched by any other resource at our disposal. Therefore, the country's collective strength *hinges* on the participation of its citizens. Unfortunately, however, much of the population perceives homeland security as a *collective* good—that they will receive the same benefits whether they contribute or not.

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LIST OF ACRONYMS AND ABBREVIATIONS

CCP   Citizen Corps Program

CERT   Community Emergency Response Team

CIKR   Critical Infrastructure and Key Resources

CPD   Community Preparedness Division

CPR   Common Pool Resource

DHS   Department of Homeland Security

DMV   Department of Motor Vehicles

FDNY   New York City Fire Department

FEMA   Federal Emergency Management Agency

HSPD   Homeland Security Presidential Directive

MRC   Medical Reserve Corps

NYPD   New York City Police Department

PDX   Portland, Oregon

QHSR   Quadrennial Homeland Security Review

SCC   Sector Coordinating Council

TSA   Transportation Security Administration

VIPS   Volunteers in Police Service

WMD   Weapon of Mass Destruction

WTC   World Trade Center

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I.   INTRODUCTION

A.   MAJOR RESEARCH QUESTION

This thesis examines the importance of the individual citizen to homeland security and explores ways in which individuals might be more effectively engaged in the execution of Department of Homeland Security (DHS) missions. DHS has described individuals as an integral part of the homeland security "enterprise," but it remains unclear whether the department truly recognizes the potential of individuals to energize the enterprise from the bottom up. Furthermore, it seems DHS overestimates the level of individual participation achievable under current policies. This thesis evaluates the tendency of individuals to remain free riders in the administration of a public good—homeland security—and considers the use of incentives as a tool to increase citizen involvement. The primary question addressed is: How can incentives be used to engage the American citizen in homeland security and thereby energize the homeland security enterprise?

B.   IMPORTANCE

In February 2010, the Department of Homeland Security released the first-ever Quadrennial Homeland Security Review (QHSR). Secretary Napolitano described it as "the most comprehensive assessment and analysis of homeland security to date."[1] Throughout the review, the department emphasized the combined role of "Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities" essential to securing the U.S. homeland.[2] The homeland security "enterprise," DHS contended, "connotes a broad-based

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[1] Janet Napolitano, "Letter from the Secretary," in *Quadrennial Homeland Security Review Report: A Strategic Framework for a Secure* Homeland, ed. U.S. Department of Homeland Security (Washington, DC: Government Printing Office, 2010), iv.

[2] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review Report: A Strategic Framework for a Secure Homeland* (Washington, DC: Government Printing Office, 2010), 12.

community with a common interest in the safety and well-being of America and American society."[3] While the entire enterprise may share such interests, it seems that the average citizen is not committed to pursuing them.

The QHSR's major focus for individual participation, in accordance with the Obama administration's guidance, is within the core mission of resilience to disasters: "Our goal is to ensure a more resilient Nation—one in which individuals, communities, and our economy can adapt to changing conditions as well as withstand and rapidly recover from disruption due to emergencies."[4] In 2007, DHS published the goal of having 72 to 80 percent of individual Americans meet department-defined emergency preparedness criteria.[5] Recent surveys, however, have suggested that somewhere between one-third and one-half of the American population has met those criteria.[6] If Hurricane Katrina is any indication, an unprepared public can prove costly. Nonetheless, despite the apparent national lessons from this disaster almost five years ago, we still observe a pervasive lack of personal concern among Americans, who continue to manifest this attitude in such behavior as building new homes in disaster-prone areas and deciding to remain ignorant of recommended emergency preparedness measures.[7]

Whether spawned from complacency, ignorance, or shirking, lack of citizen involvement poses a great risk to homeland security. With limited resources in a recessed economy, the homeland security enterprise must make efficient use of all resources available. Among those available are over three hundred million citizens. For the sake of national security, citizens' responsibilities arguably extend beyond paying

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[3] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 12.

[4] U.S. President, Proclamation, "National Preparedness Month, 2009, Proclamation 8412," *Federal Register* 74, no. 175 (September 2009): 46663.

[5] U.S. Department of Homeland Security, *Target Capabilities List: A Companion to the National Preparedness Guidelines* (Washington, DC: Government Printing Office, 2007), 57–59, http://www.fema.gov/pdf/government/training/tcl.pdf (accessed December 5, 2010).

[6] Annemarie Conroy, "What is Going to Move the Needle on Citizen Preparedness?: Can America Create a Culture of Preparedness?" (master's thesis, Naval Postgraduate School, 2008), 33.

[7] Stephen E. Flynn, *The Edge of Disaster: Rebuilding a Resilient Nation*, 1st ed. (New York: Random House, 2007), 60.

taxes, obeying laws, and voting—as Hurricane Katrina illustrated.[8] However, without mechanisms to spur engagement, history would support that those with "a free ride" will continue to enjoy it. Incentives have proven, in many similar cases, to provide such mechanisms. The homeland security enterprise might expect to continue rowing upstream if it does not consider the combined potential of individual citizens and the incentives that might encourage their direct engagement.[9]

C.   PROBLEMS AND HYPOTHESES

The research question posed raises three important problems for consideration: (1) the importance of individuals to homeland security; (2) the underutilization of individuals in homeland security; and (3) the use of incentives to engage the collective body of individuals.

The first problem raised is the assertion that individuals are important to homeland security. We know that DHS has said they are, but this thesis intends to examine the claim. On a superficial level, it would seem easy to explain why, in a general way, it is important for individuals to be active in homeland security efforts. However, the risk of such cursory treatment of the issue, like all security decisions, is two-fold. If we overestimate the importance of individuals, we bear the risk of overinvestment of limited resources in spurring their involvement, as well as the security vulnerability created by over-reliance on one aspect at the expense of another. On the other hand, if we underestimate the value of individuals to the enterprise, we risk underutilizing a vast resource in a security environment and economy where wastefulness is unforgiving. Furthermore, we risk exposing the United States to vulnerabilities that reach as far as the American population. The first two (of five) hypotheses of this thesis

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[8] White House, *The Federal Response to Hurricane Katrina: Lessons Learned* (Washington, DC: Government Printing Office, 2006), 65–66, http://georgewbush-whitehouse.archives.gov/reports/katrina-lessons-learned.pdf (accessed May 14, 2010).

[9] Charles J. Wheelan, *Naked Economics: Undressing the Dismal Science*, 1st ed. (New York: Norton, 2002), 42.

are: (1) individuals are not just important to homeland security, but *vital*; and (2) DHS underestimates this component of the enterprise, both in its overall capacity to affect homeland security and in the scope of its use.

The second overall problem—underutilization of individuals—proceeds from the first—their importance. If, in fact, individuals are proven to be important to homeland security, then a corresponding level of individual involvement must be attained to realize their benefit. This thesis examines the level of engagement of American citizens in homeland security matters and evaluates whether this level is consistent with the importance placed on their engagement. The third hypothesis is that individuals are underutilized as members of the homeland security enterprise. If this is found to be the case, the question that inevitably follows is why? While perhaps a multitude of reasons exist, this thesis examines homeland security as a public good where consumption tends to exceed production as the American public pervasively assumes the role of free rider—consuming all, but contributing little. Framing the problem in this way allows the use of a body of literature dedicated to studying ways to overcome the challenges of "collective action."

Finally, the problem explicit in the research question is how to incorporate incentives in the context of individual involvement in homeland security. Individual incentives have been useful in motivating collective action in the production of many other public goods, from environmental conservation to motor vehicle safety. However, there has not been widespread employment of such mechanisms on the individual level in homeland security. The final two hypotheses are: (4) incentives could prove useful and (5) current policies fail to leverage them properly.

D.   LITERATURE REVIEW

Study of the identified problems necessarily starts with the existing literature that examines the premise upon which the major research question is built: the importance of individuals to the homeland security enterprise. It is reasonable to assume that a DHS document hailed as "the most comprehensive assessment and analysis of homeland

security to date"—the QHSR— would be a credible starting point.[10]   The long-awaited review most certainly was the result of countless hours of thought, years of experience, and thousands of inputs.[11]   Moreover, it is the most recent expression rendered by the government of the United States' overarching homeland security policy.

The QHSR repeatedly emphasizes the importance of all members of the homeland security enterprise: "the Federal, State, local, tribal, territorial, nongovernmental, and private-sector entities, as well as individuals, families, and communities." A variation of this phrase is found four times prior to page three of the document. On the surface, it would appear that the department recognizes and is determined to emphasize the importance of individuals to the strategy.   However, when one considers that "individuals" are mentioned in what amounts to a laundry list of just about every type of entity that exists, the statements actually downplay the *particular*, or relative, importance of individuals. Rather, *every* possible organization of people—from the individual to the entire Federal government—is "important."   One might even argue that "individuals, families, and communities" appear to be an afterthought. As an individual reading the opening of this document, one might feel honored to be mentioned, but hardly inspired to do anything.

However, further reading of the QHSR would reveal that individuals indeed have an important, if not pivotal, role within the homeland security enterprise. Individuals are explicitly identified by DHS as essential partners with specific responsibilities in three of the five core missions: (1) preventing terrorism and enhancing security; (2) safeguarding and securing cyberspace; and (3) ensuring resilience to disasters.[12]   Emphasis is largely placed on individuals taking certain actions to ensure the security and readiness of themselves and their families in the face of all threats—whether a terrorist attack, a cyber incident, or a natural disaster. Such involvement is seen to alleviate the strain on the limited number of professional and government resources when needed over a widespread area. DHS clearly acknowledges the importance of specific contributions

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[10] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, iv.

[11] Ibid.

[12] Ibid., 19.

that individuals need to make. However, there is little sense that the department perceives a greater role for the individual than as one of the cogs in the homeland security system—and, then, there is one statement found buried on page sixty-nine of the review:

> The highest calling of the homeland security enterprise is to empower Americans to contribute to our country's security—to embrace a unity of purpose. Empowered individuals with a mindset of shared responsibility are uniquely capable of disrupting threats and ensuring the security of the interdependent systems that make up society. Individuals and communities are the focal point of societal resilience, enhancing public preparedness and thus diminishing the effectiveness of terrorist attacks.[13]

This statement conveys the *foundational* importance of the individual to the entire enterprise. Empowering individuals is considered "the highest calling" and yet, ironically, the idea is mentioned just once, obscured in the middle of a paragraph describing the sixth of eighteen objectives devised to meet the overall aim of "maturing and strengthening the homeland security enterprise."[14] Just prior to the passage, the QHSR describes the American people as holding "a strong sense of community, a belief in collective responsibility, and a willingness to do what is required of them to contribute to our common security and sustain our way of life."[15] The discussion leads one to conclude that the only thing that would prevent Americans from being more engaged would be if they were not *empowered* to do so.

Other homeland security specialists would agree with the notion that individuals are of critical importance to homeland security efforts, but argue that, despite its acknowledgment of this vital resource, the government has failed to capitalize on it. Stephen Flynn, former adviser on homeland security for the U.S. Commission on National Security (Hart-Rudman Commission), considers the American people to be "the greatest untapped asset" in the face of disasters.[16] In the aftermath of 9/11 and the failures of Hurricane Katrina, he suggests shortsightedness on the part of federal leadership in failing to draw on the public's patriotism, sense of duty, and

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[13] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 69.

[14] Ibid.

[15] Ibid.

[16] Flynn, *Edge of Disaster*, 171.

resourcefulness.[17] Robert Bach and David Kaufman agree that individual engagement should be the cornerstone of effective homeland security, but has been treated as a "nice thing to do" rather than as a national imperative.[18] They assert that "the American public has been left out and largely missing in action" due to misunderstanding and mistrust between the people and the government.[19] Secretary of Homeland Security Janet Napolitano recently voiced a similar opinion, claiming that the government has long viewed the public as a security liability rather than an asset, and that "a culture of responsibility" was needed.[20] The consensus among government officials and scholars alike seems to be that individuals are underutilized. The debate is over what to do about it.

After almost nine years since 9/11, the goals of an involved citizenry and a security-minded culture continue to elude us. Bach and Kaufman contend that the problems of complacency and denial can be solved through more open communication with the public about the risks, inclusion of communities in the decision-making process, and additional avenues for people to answer the call to service.[21] Flynn argues that these things are important, but adds that incentives are also needed to keep the public from sliding back into complacency.[22] Some research has shown promise in building awareness and influencing a homeland security culture through information campaigns and education, citing the successes of similar campaigns for drunk driving prevention and safety belt education.[23] While such campaigns have initially proven quite effective,

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[17] Flynn, *Edge of Disaster*, 172.

[18] Robert Bach and David J. Kaufman, "A Social Infrastructure for Hometown Security: Advancing the Homeland Security Paradigm" (paper, Naval Postgraduate School, Center for Homeland Defense and Security, Monterey, CA, 2009), http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA499970&Location=U2&doc=GetTRDoc.pdf (accessed May 23, 2010).

[19] Ibid.

[20] Janet Napolitano, "Common Threat, Collective Response: Protecting against Terrorist Attacks in a Networked World" (speech to the Council on Foreign Relations, New York, July 29, 2009), http://www.cfr.org/publication/19929/common_threat_collective_response.html (accessed May 24, 2010).

[21] Bach and Kaufman, *Hometown Security*, 6–10.

[22] Flynn, *Edge of Disaster*, 172.

[23] Paula S. Bloom, "Citizen Preparedness Campaign: Information Campaigns Increasing Citizen Preparedness to Support Creating a 'Culture of Preparedness'" (master's thesis, Naval Postgraduate School, 2007), 79–82.

desensitization and complacency often hamper long-term results, necessitating additional mechanisms, such as enforcement, in the given examples, to achieve sustainability. It seems that, while people may have noble intentions and genuine interests in voluntarily contributing to societal goals, it usually takes a sufficient "nudge" to garner widespread support—even if that support only requires one to be receptive to new ideas through education and training. The reticent nature of individuals in the context of large group interests is best addressed through the literature on collective action.

Most contemporary collective action work originates, in one form or another, from the foundational book, *The Logic of Collective Action*, written by Mancur Olson in 1965. Olson reasoned that rational, self-interested individuals of a large group will not voluntarily act in the interests of the group. The logic behind his argument was simple: a rational individual realizes that his contributions to the group are imperceptible, that the difference he can make is infinitesimal. Furthermore, he argued that even a completely selfless individual who is willing to abandon all personal interests will rationally choose to allocate his resources elsewhere, so that they would be used to make a noticeable difference in someone's life.[24] The logic is especially prevalent in the case of a public good that is largely seen as being provided by the government, such as national defense—or homeland security.

Olson defines a public good as any good that, if consumed by one person in the group, cannot be withheld from the rest of the group. Specifically, those who do not pay anything for the public good cannot be excluded from sharing in its consumption. The logic of collective action is why no modern state government has ever been able to subsist on voluntary contributions by its citizens, despite "the force of patriotism, the appeal of national ideology, the bond of a common culture, or the indispensability of law and order." Therefore, the compulsory device of taxation is employed.[25] At the heart of collective action theory is the free rider problem. The member of a group who cannot be excluded from the benefits it provides is motivated to enjoy those benefits without

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[24] Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge, MA: Harvard University Press, 1965), 64.

[25] Ibid., 13–15.

contributing, or to *free ride*, thus diminishing the overall benefit for the group. Olson's theory is useful for explaining how a group of rational people often creates irrational results from the perspective of the group.[26]

Elinor Ostrom synthesized a number of such free rider cases in order to examine the types of institutions that have evolved to effectively deal with this problem and create desirable group outcomes. In addition to Olson, her study relied on the "tragedy of the commons" theory first posited by Garrett Hardin and the "prisoner's dilemma" model attributed to Merrill Flood and Melvin Dresher.[27] Ostrom specifically considered cases where groups were composed of self-interested consumers of "common pool resources," or CPRs, that were threatened by depletion, such as groundwater or fisheries. She did not view public security as fitting the definition of a CPR because its consumption does not have a subtractive effect on the resource. In other words, consumption by one does not reduce the level of security available for the larger group.[28] Rather, she considered public security to be a *pure* public good. *Homeland* security, on the other hand, is more complex. As already discussed, individuals themselves are largely considered homeland security resources, so free riders do, by definition, subtract from the resources available. As an example, we might consider individuals who have decided to remain unprepared to deal with disaster as subtracting from the pool of available first-responders when that disaster strikes. Applying Ostrom's work to our specific homeland security problem is an interesting idea for future research.

One thing the literature makes clear is that overcoming the free rider problem in a group as large and diverse as the American population has no single, simple solution. This is evident in the myriad theories that have been formed by literally hundreds of top economists, political scientists, and sociologists on why the problem exists and possible solutions to it. To even scratch the surface of them would be well beyond the scope of this thesis. Therefore, research is limited to examination of the incentive of the American

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[26] Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (New York: Cambridge University Press, 1990), 6.

[27] Ibid., 6.

[28] Ibid., 32.

citizen to do nothing, rather than engage his or her responsibilities within the homeland security enterprise. This incentive is the essence of the collective action challenge.[29] To overcome the incentive to free ride, Olson theorized that "only a *separate and 'selective' incentive* will stimulate a rational individual in a [very large] group to act in a group-oriented way."[30] This thesis examines the applicability of Olson's theory to individual engagement in homeland security within the United States. Thus, Olson forms the theoretical foundation from which the major research question is addressed. Criticisms to these theories will form a necessary component of the analysis.

E. METHODS AND SOURCES

This thesis intends to accomplish three goals: (1) to assess the level of importance of the individual to the homeland security enterprise; (2) to assess whether individuals are adequately engaged; and (3) to determine how incentives might be used to increase citizen involvement in homeland security. The methods used were designed with these goals in mind, in an effort to ensure a well-founded argument would be presented in response to the major research question.

This thesis attempts to assess the *absolute* importance of individuals by examining a number of homeland security incidents—such as successful and unsuccessful terrorist attacks and natural disasters—where individuals played a direct role or had the clear potential to do so. Cases studied include the 9/11 attacks, Hurricane Katrina, the Times Square car bomb, the Fort Dix foiled plot, and a mysterious explosion in Portland, Oregon, in March 2010, which has come to be known as the "PDX Boom." Sources used will primarily be government-produced and government-sponsored reports as well as other expert analyses of the incidents. Additionally, this thesis attempts to characterize the *relative* importance of individuals to the homeland security enterprise by considering the aggregate effect an engaged citizenry might have on the enterprise itself, as created through mechanisms such as direct democracy and as explained by theories such as public choice. Promising sources for this purpose include Nancy Robert's

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[29] Ostrom, *Governing the Commons*, 42.

[30] Olson, *Logic of Collective Action*, 50–51. Emphasis included by the author.

anthology, *The Age of Direct Citizen Participation*, and, in addition to Olson, various works by public choice theorists, including Anthony Downs' classic, *An Economic Theory of Democracy*, and the comprehensive two-volume compilation, *The Encyclopedia of Public Choice*, edited by Charles Rowley and Friedrich Schneider.

To assess whether citizens are adequately engaged in homeland security, this thesis considers expert opinion as well as the results of recent credible surveys and polls conducted to assess the level of citizen awareness of and involvement in homeland security activities, such as FEMA's *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey*.

Finally, the main thrust of research is focused on the question of incentives or other mechanisms that might motivate individuals to act. This thesis will examine a case of successful citizen engagement—Israel—and analyze the framework used to overcome the free rider problem, ultimately seeking applicability of Olson's theory and Israel's case to United States homeland security. Israel is well-known for its citizens' pervasive involvement in security matters. Primary sources include previous studies—some comparative with the United States—of Israeli counterterrorism and preparedness policies, such as the ones done by Hasisi, Lehrer, Tucker, and Conroy.

F.   THESIS OVERVIEW

The body of this thesis follows a logical three-part sequence: (1) an assessment of the importance of the individual to homeland security; (2) an assessment of the current level of engagement of individuals in homeland security; and (3) reasons why individuals choose not to participate, drawing on lessons from Israel in overcoming impediments. Following this introduction, the three parts plus a conclusion will form the remaining chapters.

Chapter II will explore the role of the individual within the homeland security enterprise. The relevance of the major research question originates here. Sections include: (1) the importance as portrayed in the rhetoric of homeland security leaders; (2) the importance as assessed from previous homeland security incidents; and (3) the potential for the individual to effectively *energize* the entire homeland security enterprise.

Chapter III provides (1) an assessment of current individual engagement in U.S. homeland security; (2) an examination of the current approach; and (3) an assessment of the flaws in the current approach.

Chapter IV will examine the reasons why individuals would choose not to fulfill their homeland security responsibilities. Sections include: (1) the theory of collective action, with discussion of public goods and the source of the free rider problem; (2) general solutions to the free rider problem observed with individuals in homeland security; and (3) an examination of Israel's framework for dealing with free-rider problem as it relates to collective action theory.

Chapter V will seek to tie the research together and summarize overall conclusions reached.

II.   HOMELAND SECURITY'S MOST VITAL RESOURCE

> Empowered individuals with a mindset of shared responsibility are uniquely capable of disrupting threats and ensuring the security of the interdependent systems that make up society.   Individuals and communities are the focal point of societal resilience, enhancing public preparedness and thus diminishing the effectiveness of terrorist tactics.[31]

The Department of Homeland Security (DHS) has declared that "the highest calling of the homeland security enterprise is to empower Americans to contribute to our country's security."[32]   It is a bold claim that deserves consideration and, perhaps, validation. Therefore, this chapter assesses the value of the individual American citizen to the production of effective homeland security. Using a threefold approach, it argues that individuals collectively form the nation's greatest resource in dealing with today's threats. First, it considers the relevant remarks of national security leaders and homeland security experts, including looks at the latest *National Security Strategy*, recent DHS guidance, and the arguments of credible leading experts in the field. Next, the chapter assesses the effectiveness or potential effectiveness of everyday citizens as demonstrated in previous homeland security incidents, including the attacks of 9/11, Hurricane Katrina, and others. Finally, the chapter examines the population's latent potential to affect homeland security in even greater ways than through the department's stated mission objectives—that is, the individuals' potential to *energize* the entire homeland security enterprise.[33]

A.   THE RHETORIC

The words of homeland security professionals, like the ones that open this chapter, suggest that private American citizens form the cornerstone of a secure nation. Indeed, with the issue of the 2010 *National Security Strategy*, we find that the notion of

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[31] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 69.

[32] Ibid.

[33] Ibid., 12. The term *enterprise* will be used frequently throughout this thesis. It is taken from the *Quadrennial Homeland Security Review* and, here, refers to "Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities" who are said to share responsibility for sustaining homeland security capabilities.

national security has once again turned a corner in the United States. We are no longer to assume that government agencies have the monopoly on national security-providing services. Among other dramatic changes from previous versions, the latest *National Security Strategy* acknowledged a significant role for the American citizen in ensuring the security of the country and its people. For the first time, the president's strategy called out a direct link between national security and "the strength and resilience" of the nation's citizens, citing a blurring distinction between homeland and national security.[34] More specifically, the strategy indicated that informed and empowered citizens formed the greatest counter to radicalized individuals at home, and that equipping such citizens to protect themselves was to be a primary emphasis in the effort to ensure the country's preparedness for "the full range of threats and hazards," including terrorism, natural disasters, large-scale cyber attacks, and pandemics.[35]

Whether or not it is implementable, the White House's strategy is easily justified. The new emphasis on citizen participation is the culmination of almost a decade of learning. The unprecedented attacks of 9/11 exposed to the entire nation the complex threat of international terrorism, revealing an enemy who could prepare for an attack on the United States and its citizens from virtually anywhere in the world, even from U.S. soil. The devastation left by Hurricane Katrina illustrated the indispensability of individual preparedness. The Fort Hood shooting made real the threat of homegrown radicalization leading to extremist violence. The failed Times Square bombing attempt reaffirmed the importance of individual action. The list goes on. The federal government, in effect, has acknowledged that it lacks the resources to be everywhere at once. Furthermore, the American people would not want them there.

Appropriately, DHS has more specifics. In constructing the enterprise's "strategic framework" in the *Quadrennial Homeland Security Review*, the department has identified five core missions and one additional focus area.[36] To define success in each of these areas, DHS has further specified 14 goals and 61 supporting objectives. When combined

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[34] White House, *National Security Strategy* (Washington, DC: Government Printing Office, 2010), 10.

[35] Ibid., 18–19.

[36] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 3.

with the guidance in the *National Security Strategy*, we can identify the following objectives—and their overarching goals and missions—in which individuals, or "the public," are clearly intended to play a primary role:

- Mission 1: Preventing Terrorism and Enhancing Security

    - Goal 1.1: Prevent Terrorist Attacks

        - Stop the spread of violent extremism: Prevent and deter violent extremism and radicalization that contributes to it[37]
        - Engage communities: Increase community participation in efforts to deter terrorists and other malicious actors and mitigate radicalization toward violence[38]

- Mission 3: Enforcing and Administering Our Immigration Laws[39]

    - Goal 3.1: Strengthen and Effectively Administer the Immigration System

        - Promote lawful immigration: Clearly communicate to the public information on immigration services and procedures (50–51)

- Mission 4: Safeguarding and Securing Cyberspace

    - Goal 4.2: Promote Cybersecurity Knowledge and Innovation

        - Enhance public awareness: Ensure that the public recognizes Cybersecurity challenges and is empowered to address them (54–57)

- Mission 5: Ensuring Resilience to Disasters

    - Goal 5.1: Mitigate Hazards

        - Reduce the vulnerability of individuals and families: Improve individual and family capacity to reduce vulnerabilities and withstand disasters (59–60)

    - Goal 5.2: Enhance Preparedness

        - Improve individual, family, and community preparedness: Ensure individual, family, and community planning, readiness, and capacity-building for disasters (60–61)

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[37] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 38–39. Though not explicitly called out in this objective, by cross-referencing the *National Security Strategy*, we know that individuals are intended to be one of the primary defenses against domestic radicalization (White House, *National Security Strategy*, 19).

[38] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 38–39. Hereafter sighted in text.

[39] Mission 2, "Securing and Managing Our Borders," was skipped intentionally as it did not imply citizen participation in any of its goals or objectives.

- Goal 5.3: Ensure Effective Emergency Response

  - Provide timely and accurate information to the public: Establish and strengthen pathways for clear, reliable, and current emergency information, including effective use of new media (62–63)
- Goal 5.4: Rapidly Recover

  - Ensure continuity of essential services and functions: Improve capabilities of families, communities, private-sector organizations, and all levels of government to sustain essential services and functions (63–64)
- Maturing and Strengthening the Homeland Security Enterprise

  - Enhance Shared Awareness of Risks and Threats

    - Establish a common security mindset: Promote a common understanding of security and threat awareness as a shared responsibility (65–69)
  - Build Capable Communities: Foster communities that have information, capabilities, and resources to prevent threats, respond to disruptions, and ensure their own well-being (69)

  - Foster Unity of Effort: Foster a broad national culture of cooperation and mutual aid (71)

DHS intends for the outlined objectives to contribute directly to top-level, strategic outcomes. As such, the objectives themselves do not offer useful instructions for individuals wanting to participate. However, they do convey federal acknowledgement that citizens will play a pivotal role if the nation is to fulfill homeland security missions, especially where dealing with disasters is concerned. Between current national and homeland security strategies, the U.S. government has made it clear that success depends upon direct citizen engagement.

Although previous strategies have not so directly enlisted the contributions of individuals, the rhetoric itself is not new. In the first official homeland security strategy, the Bush administration called for an approach "based on the principles of shared responsibility and partnership with the Congress, state and local governments, the private sector, and the American people."[40] Tom Ridge, the first Secretary of Homeland

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[40] White House, *National Strategy for Homeland Security* (Washington, DC: Government Printing Office, 2002), 2.

Security, remarked that it was "critical, absolutely critical, that we reach out to our citizens and empower them to play a more direct role."[41] Secretary Ridge's successors have voiced similar views.[42]

Though their arguments seem logical, one might expect such sentiments from government officials who are simply trying to bolster public support for their programs. It could be that officials intend such rhetoric primarily to unify the country in the fight against terrorism and other hazards, rather than actually to achieve direct citizen participation. There is plenty of evidence, for example, to suggest that policymakers view the public as "either potential attack victims or panicked masses," rather than as partners in countering terrorism.[43] Secretary Napolitano, herself, recently acknowledged that the government had long "treated the public as a liability to be protected rather than an asset in our nation's collective security."[44] However, there are others, outside of government, who are also claiming the importance of individuals to homeland security efforts.

Stephen Flynn is perhaps one of the most outspoken advocates of public participation in homeland security. Before his selection as the president of the Center for National Policy, Flynn served ten years as a National Security Studies senior fellow at the Council on Foreign Relations. In direct support of President-elect Obama's transition into office, Flynn also served as the lead policy advisor on homeland security.[45] He is a frequently cited homeland security expert. Flynn argues that the United States' "greatest

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[41] Tom Ridge, Remarks to the Council for Excellence in Government, Washington, DC, September 16, 2003, http://www.dhs.gov/xnews/speeches/speech_0129.shtm (accessed November 1, 2010).

[42] Michael Chertoff, remarks at the Brookings Institution, Washington, DC, June 1, 2006, http://www.dhs.gov/xnews/speeches/speech_0283.shtm (accessed November 1, 2010). Napolitano, "Common Threat, Collective Response."

[43] Amanda J. Dory, "American Civil Security: The US Public and Homeland Security," *The Washington Quarterly* 27, no. 1 (2003), 38–39, http://www.twq.com/04winter/docs/04winter_dory.pdf (accessed October 21, 2010).

[44] Napolitano, "Common Threat, Collective Response."

[45] Center for National Policy, "Dr. Stephen Flynn, CNP President," The Center for National Policy, http://www.centerfornationalpolicy.org/ht/d/Items/cat_id/16640/sortby/date/direction/des/paginateItems/5/paginateItemsPage/1/pid/16477 (accessed November 1, 2010).

untapped asset is the American people."[46]   He bases his argument on the underlying premise that societal and infrastructure *resiliency* to natural disasters and terrorist attacks should be the overriding national policy objective.[47]   This is in contrast to the DHS position that *preventing terrorism* is the foundation of homeland security.[48]   Flynn describes national resiliency as reducing vulnerabilities and increasing the ability to recover quickly from any disaster.[49]   When one contemplates this concept alongside the recognition that ninety percent of Americans are living in locations with medium to high risks of natural disaster, it is easy to consider citizens the "ultimate stakeholder[s]" in homeland security.[50]   In the light of highly likely, indiscriminate, yet somewhat predictable natural disasters, in addition to the prospect of discriminate, unpredictable terrorist attacks, it becomes clear that the government's reach is severely limited in a nation of over 300 million citizens.   Now add immigration, border security, and cybersecurity, and we can see why DHS is soliciting partners in ensuring homeland security.

The pervasive rhetoric within the homeland security community is that success depends upon citizen participation.   However, we might reasonably expect such expressions whether the argument was legitimate or not.   It is hard to imagine, anyway, a declaration that citizen engagement is unnecessary or just "nice to have."   Therefore, it is worth examining some of the lessons from past homeland security incidents to help validate these predictable claims.

B.   THE FACTS

Homeland security officials' call for citizen engagement seems to be consistent with the threat environment over the past ten years, but what does experience say?   Are

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[46] Flynn, *Edge of Disaster*, 171.

[47] Ibid., 110.

[48] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 38.

[49] Flynn, *Edge of Disaster*, xxi.

[50] Ibid., xxi–xxii.

individuals *that* important to homeland security? What, specifically, can we learn from recent attacks and natural disasters? Here we consider a few of the more notable incidents—as well as one or two that are *not* so notable.

1.   9/11

There is no doubt that the attacks of 9/11 have shaped the very policy we consider here. Simply put, before 9/11 there were no "homeland security" policies or department in existence. The event was unprecedented in American history and remains the primary driver in official policy almost a decade later. There is likely no greater documentation on any terrorist attack in history, so there is almost certainly something to learn regarding the role of individuals in homeland security.

Although the attacks illustrated that just about every entity involved was unprepared for such an extraordinary event, a number of specific acts demonstrated the potential of individuals to play a decisive role in responding to disaster. The most notable, of course, was the action taken by the passengers of United Flight 93 to subdue or otherwise cause the hijackers to abandon their attack plan and crash the aircraft in an empty field near Shanksville, Pennsylvania. What set this flight apart from the other three that day was the fact that it took off late enough that its passengers were able to learn of the outcome of the previous hijackings before their hijackers were able to follow through. This added information is the only specific preparation they had that enabled them to take decisive action. The 9/11 Commission's report gives the impression that no other currently existing homeland security enterprise entity could have managed what Flight 93's passengers did in the face of the utter chaos of that day to that point. They were individual citizens acting independently and completely unprepared, and they undoubtedly saved a great number of lives as well as a national symbol.[51]

The efforts of citizens aboard the other three flights were unable to prevent the aircraft from reaching their eventual targets, but they were not without effect. We know of multiple flight attendants and individuals aboard each of the flights that took action to

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[51] Thomas H. Kean and others, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York: W.W. Norton & Company, 2004), 10–14, 45.

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relay specific information to people on the ground about what was going on in their aircraft. Aboard American Flight 11, it is likely that one passenger was stabbed from behind when he attempted to stop a hijacker in front of him. On United Flight 175, there is evidence of passengers who considered storming the hijacked cockpit (5–9).

Although none of these efforts would seem to have a direct impact on these particular flights, they were essential to reconstructing the attacks afterward. It is also reasonable to believe that if these passengers had been armed with the knowledge that this kind of attack was plausible—like the passengers on United Flight 93—the outcome may have been different. To date, there have been no noticeable efforts by the federal government to teach civilian passengers how to respond to such scenarios if they were to reoccur. Judging by the well-publicized measures often altered by the Transportation Security Administration (TSA) and the focus on intelligence and customs policies, it seems that DHS has focused almost exclusively on prevention in this area. Any reactive capabilities apparently have been vested in air marshals, flight crew training, cockpit defenses, air traffic control, and combat aircraft response, but not in individual citizens. The Christmas Day (2009) bombing attempt suggests that placing some level of confidence in airline passengers is warranted and, in some cases, may prove more effective than prevention efforts—even against an inept attacker.

In New York, the scene on the ground is one that has been immortalized. The acts of heroism and selflessness performed by first responders will forever be recognized as symbolic of national resiliency and American pride. The New York City Fire Department (FDNY) and the New York City Police Department (NYPD), for example, will long be remembered as heroes of 9/11. However, they were not the *first* ones on the scene. As the 9/11 Commission puts it, the "first" first responders were the people who were present when the attacks occurred: the employers and employees occupying the buildings (317). Given that the private sector owns and operates approximately 85 percent of the country's critical infrastructure, this is the case for nearly every disaster.

The commission's research revealed that individual responses at the World Trade Center (WTC) varied. Some individuals evacuated immediately, some stayed put awaiting direction or assistance, some lingered to gather personal belongings or even to

continue working, and some took the initiative to go help others (287). Many of the individuals who did ultimately evacuate were reportedly confused by deviations in stairwells through transfer hallways and smoke doors that were perceived to be dead ends—features that perhaps should have been familiar based on evacuation drills (287–294). The commission ultimately concluded that many of the individuals at the World Trade Center on September 11, 2001, had not taken preparedness seriously (318).

While the response at the Pentagon was by no means flawless, it has generally been regarded as a great deal more efficient than that at the WTC. The commission's report identified a number of reasons for this, not the least of which was the vast difference in scale and complexity between the tasks. The primary lessons drawn from the crash at the Pentagon regarded command, control, and communication between multiple organizations and were lessons common to the response in New York. The commission did not cite individual preparedness or individual action as contributing to or detracting from the efficiency of the response at the Pentagon (311–315).

The conclusions we can draw from 9/11 are that, while it could never have been expected to prevent the attacks from occurring, individual involvement did save lives, and that greater involvement, through individual preparedness, might have saved more. The 9/11 Commission summarized, "One clear lesson of September 11 is that individual citizens need to take responsibility for maximizing the probability that they will survive, should disaster strike" and "*the* lesson of 9/11 for civilians and first responders can be stated simply: in the new age of terror, they—we—are the primary targets."[52] In that sense, they—we—are also the first line of defense.

2. Hurricane Katrina

In August 2005, Hurricane Katrina made landfall along the Louisiana coast. Though it had weakened to a Category 3, it would prove to be the most destructive natural disaster in U.S. history. At $96 billion, the damage was triple that of Hurricane Andrew in 1992. Katrina surpassed the damage caused by the Chicago Fire of 1871 and the San Francisco Earthquake and Fire of 1906. The greatest loss was due to the eighty

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[52] Kean et al., *9/11 Commission Report*, 318, 323. Emphasis added.

percent flooding of New Orleans, but the devastation extended into Mississippi as well. There were 1,330 lives lost. Over one million people were evacuated. While there were scores of heroic actions performed by courageous and competent responders, the overall ability of local, state, and federal authorities to organize and react was seen as a dramatic failure. As a result, President Bush directed a comprehensive review of the federal response in order to prevent such failures in the future.[53]

In accordance with the President's order, the White House staff produced *The Federal Response to Hurricane Katrina: Lessons Learned* in February 2006. The report identified dozens of lessons learned and from them developed 125 recommendations. It called for "transformational change" to national preparedness and identified two immediate priorities. The second of those was thought to be "the most profound and enduring: the creation of a Culture of Preparedness" (78). The report emphasized individual and community preparedness as one of the most effective aspects of such a culture:

> If every family maintained the resources to live in their homes without electricity and running water for three days, we could allocate more Federal, State, and local response resources to saving lives. Similarly, if every family developed their own emergency preparedness plan, they almost certainly would reduce the demand for outside emergency resources. (80)

Although these statements are so obvious that they are inarguable, it is not readily apparent how such lessons were drawn from the experience of Hurricane Katrina, in particular. In the first place, affected families would find their homes uninhabitable due to flooding within hours of hurricane landfall—or, in many other cases, would find their homes … gone. By the morning after landfall, over 80 percent of New Orleans was underwater at depths of up to 20 feet (34–36). In the ensuing days of recovery, the U.S. Coast Guard alone would rescue approximately 33,000 stranded citizens, most trapped on their roofs and in their attics (38). Though individual emergency kits may have been helpful, it seems they would have done little to alleviate the strain on responders in this case. Across much of Mississippi's coast, houses—in fact, entire towns—were swept off

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[53] White House, *Hurricane Katrina*, 5–9.

their foundations, leaving no standing structures behind (33–34). For those directly impacted by the storm, the enormity of Hurricane Katrina's destructive power seems to have negated many of the benefits that might otherwise have been realized with 72-hour individual home emergency kits. Evacuation was the best hope for those individuals and families who had homes anywhere near the hurricane's path.

While it is not immediately clear what importance emergency kits would have had in Katrina, we do know of many individuals who were in harm's way and then seemed to trickle into downtown New Orleans over the few days following landfall (38–39). Most of them were subsequently evacuated from the Superdome or the Convention Center. Some of them likely arrived *after* being rescued, but it is reasonable to believe that others survived the hurricane and then found their way downtown on their own. Whatever supplies these people had on hand when the storm hit may have made the difference, allowing them to reach evacuation departure points days after the storm had passed, without the help of rescue services. It is also possible, and just as likely, that these people had received supplies from any of the several supply delivery missions performed by government agencies (43). Either way, the thousands of "late arrivers" to downtown New Orleans would have added a significant contribution to the response effort if they, in fact, did have their own emergency supplies prepared beforehand. Regardless, the eventual disposition of almost all New Orleans residents was evacuation, whether before or after hurricane landfall.

Family emergency preparedness plans no doubt proved indispensible for those who were able to evacuate before the storm hit. Those with specific, well-thought-out emergency plans would likely have been able to depart much more quickly than those without. Either way, by Sunday night, before the early Monday morning landfall, officials estimated that 1.2 million residents, or 92 percent of the population, had evacuated New Orleans (29). If these figures were accurate, this meant that over 100,000 residents would stay put as the hurricane passed through. However, this should have come as no surprise. Prior to Katrina, hurricane plans had estimated that about the same number of residents were without automobiles (26). Lack of personal transportation would severely limit the efficacy of an individual emergency preparedness plan,

especially with 100,000 neighboring residents in the same predicament. Ultimately, the federal government would use over 1,100 buses to evacuate tens of thousands from dire conditions at the Superdome and the Civic Center in the days following the storm's passage (39). The recovery of civilians from areas devastated by the hurricane was an enormous challenge, but would have been insurmountable had over one million residents lacked the ability or the initiative to get out of harm's way ahead of time.

While the Hurricane Katrina disaster would provide great impetus for renewing personal preparedness commitments, the value of personal preparedness in this case would be overcome by the scope of the devastation and the shortcomings of federal, state, and local organizations in dealing with it. Those who had prepared were likely thankful that they had, but it is also likely that even a "culture" of individual preparedness would have had only a minor impact in the face of such destruction, and such failures.

One lesson we *can* derive directly from Hurricane Katrina is the value of civilian volunteers in disaster recovery efforts. For example, the Citizen Corps, which developed out of post-9/11 policy implementation, gathered over 50,000 volunteers to provide direct support to the American Red Cross in administering assistance to refugees who had evacuated to the Houston, Texas, area (80). Their service was essential to the 25,000 evacuees, in particular, who took up residence in the Astrodome while awaiting recovery of New Orleans, or a new start somewhere else. While the relative value of individual preparedness in coping with Hurricane Katrina is debatable, the value of citizen participation is not.

3.   Foiled Plots

While the work that has been done to capture the lessons from 9/11 and Hurricane Katrina is voluminous, there is an emerging literature on lesser-known homeland security incidents, ones that did not result in widespread death and destruction: unsuccessful terrorist plots. Often these incidents go practically unnoticed by mainstream media. They fail to attract a great deal of attention *because* they were unsuccessful. The failed Christmas Day and Times Square bombing attempts received brief publicity in large part because they provided opportunities to point fingers at the federal government for letting

would-be terrorists get that far. In each of these two cases, the failures of the attackers have been credited to a combination of their own ineptitude and the fortunate "late saves" of private citizens. However, greater analysis of failed attacks would indicate that private citizens are due at least as much credit for failed terrorist plots as intelligence, federal law enforcement, and state and local law enforcement.

In one recent study, researchers identified 86 planned terrorist attacks that were "intended to cause casualties or destroy critical infrastructure" in the United States between 1999 and 2009.[54] Of these, 68 plots (80 percent) were foiled prior being executed. Of the foiled plots, voluntary public reporting provided the initial clues for almost 30 percent (20 cases). By comparison, federal law enforcement was the source responsible for the initial information in 20 cases, state and local law enforcement in 15 cases (22 percent), and intelligence in just 13 cases (19 percent) as shown in Figure 1.[55] Of course, since all research was conducted using open source material, it might be safe to assume that actual intelligence numbers are higher. Nonetheless, the contributions of individual citizens are significant.

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[54] Kevin Strom and others, *Building on Clues: Examining Successes and Failures in Detecting U.S. Terrorist Plots, 1999–2009* (Research Triangle Park, NC: Institute for Homeland Security Solutions, 2010), 5–6, https://www.ihssnc.org/portals/0/Building_on_Clues_Strom.pdf (accessed November 10, 2010).

[55] Ibid., 12.
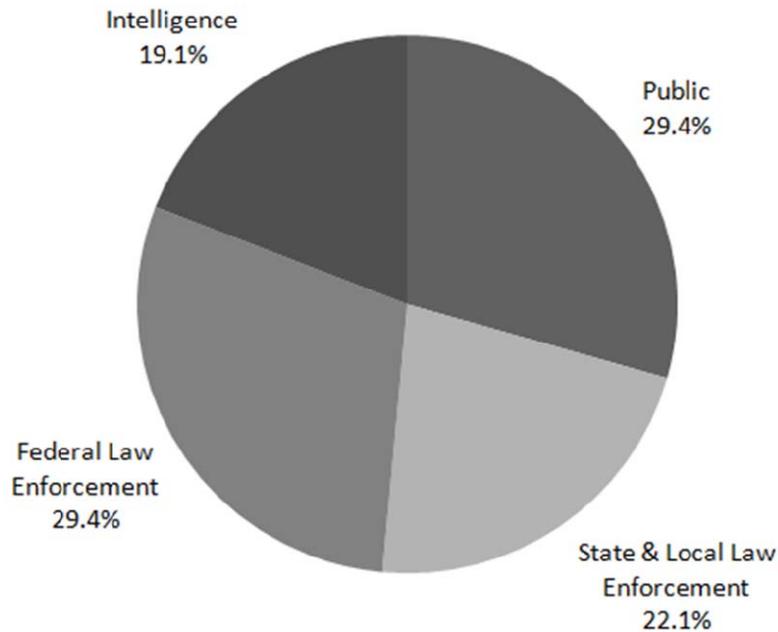
Figure 1.   Source of Initial Clues in Foiled Terrorist Plots, United States, 1999–2009[56]

The message revealed in the study of failed terrorist attacks is *not* that complex intelligence analysis is critical to detection, but that citizens and law enforcement officials are responsible for obtaining the initial clues for most—eighty percent, in fact—terrorist plots that are brought to light in time to stop them. Therefore, the widely held notion that a *successful* terrorist attack is due entirely to the failure of the intelligence community to analyze available information does not follow. In the study of perhaps the most comprehensive dataset of failed terrorist plots within the last 25 years—a total of 169 events plotted against American targets—one researcher concludes, "the conventional wisdom about why intelligence fails—because analysts and agencies are unable to 'connect the dots'—is wrong."[57] Rather, "plots are [more typically] disrupted as a result of tips from the public, informants inside home-grown cells, and long-term surveillance of suspects."[58]

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[56] After Strom et al., *Building on Clues*, 12.

[57] Erik J. Dahl, "The Plots that Failed: Intelligence Lessons Learned from Unsuccessful Terrorist Attacks Against the U.S." (Technical Paper, Naval Postgraduate School, Monterey, CA, 2010), 1.

[58] Ibid., 26.

a.   *Times Square*

The Times Square car bomb is an example of a terrorist plot that was first discovered by private citizens. In this case, a couple of street vendors observed smoke, popping sounds, and sparks coming from an illegally parked Nissan Pathfinder and then reported it to the NYPD.[59]   While the actions of these individuals were important and certainly commendable, the Times Square incident does not build a strong case for the importance of individuals to counterterrorism efforts. This plot was discovered in the execution phase and, had the attacker been a more competent bomb maker, the first clues might not have been smoke and sparks, but a high-order detonation. The Times Square plot was effectively foiled by the would-be terrorist himself. Americans should consider themselves lucky, in this case. However, this case has not been typical of foiled plots, as the aforementioned research attests. The following section examines a more instructive case.

b.   *Fort Dix*

In January 2006, a Circuit City employee tipped off authorities to a group of six "Islamic militants" who would ultimately be arrested and charged with planning to attack and kill as many soldiers as they could at Fort Dix, New Jersey. The group of men, who had trained together for such a plot, brought an 8mm videotape of their activities to Circuit City to be copied to a DVD. The employee responsible for making the copy was disturbed by what he watched on the video, which showed the men firing automatic weapons and chanting. The next day he reported the video to local police, who then sent copies to the FBI. What ensued was a lengthy investigation, which included close surveillance and the use of planted informants, ultimately leading to the conviction of all six members in December 2008. Four of them received life sentences for conspiracy to kill military personnel. This foiled plot serves as a tremendous example of

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[59] Corey Kilgannon and Michael S. Schmidt, "Vendors Who Alerted Police Called Heroes," *The New York Times,* May 2, 2010, http://www.nytimes.com/2010/05/03/nyregion/03vendor.html (accessed November 11, 2010).

the unique potential of everyday citizens to have a decisive impact in terrorism prevention. The Fort Dix case is considered in many ways to be typical of foiled plot cases seen in recent years.[60]

4. PDX Boom

On March 28, 2010, at around 8 p.m., an explosion rattled buildings in downtown Portland, Oregon. The police received about fifty 911 calls over the incident, promptly responded, and yet were unable to locate the source of the disturbance. When they arrived in the vicinity from which the majority of calls came, there were no indications of an explosive event: no burning buildings, no smoke, no victims, and no clues. Rather, many of the clues were to be constructed over the next twelve hours by private citizens via electronic social media. First via Twitter, using the hashtag, "#pdxboom," then via Google Maps, people began to report what they had heard and where they were when they heard it.[61] Some savvy Google Maps users created a color-coded system that displayed the location and relative intensity of the sound.[62] When the capacity of Google Maps entries was reached, these users found a way to download entries and continue to compile the complete picture. After enough reports came in, a pattern emerged. In the daylight of the next morning, local police were able to use 911 and online citizen inputs to locate PVC fragments of an exploded pipe bomb in a nearby riverfront park.[63] While the event proved harmless, it holds at least three key lessons for homeland security: (1) the currently prescribed means of public reporting are unnecessarily limiting; (2) the composite picture created by the collection of many individual inputs of private citizens

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[60] Dahl, "Plots that Failed," 20–21.

[61] "PDX" is the three-letter airport identifier for Portland, as "LAX" might be used to refer to Los Angeles itself. "Hashtags" are identifiers that allow posts to be categorized or separated from an enormous number of inputs on Twitter.

[62] The last saved version of the resultant map can still be seen at http://maps.google.com/maps/ ms?ie=UTF8&hl=en&oe=UTF8&start=400&num=200&msa=0&msid=105810967145978747791 .000482e8231e3af9d5624&ll=45.468679,122.633514&spn=0.073917,0.16016&z=13. This map does not show every pin that was placed. One of the lessons learned from the event is that Google Maps was unable to keep more than 200 inputs.

[63] Mary Wheat, "Portland Police Investigate Loud Explosion," Portland Police Bureau, City of Portland, Oregon, http://www.portlandonline.com/police/pbnotify.cfm?action=ViewContent &content_id=1620%20 (accessed April 9, 2010).

may sometimes be the best information available; and (3) the potential role for individuals in homeland security may be far greater than traditionally perceived.

Most of the information gained by law enforcement in this incident came by way of social networking applications. The information was unsolicited and yet hundreds of Portland residents provided it, indirectly, using technology that they were accustomed to using in their personal lives on a daily basis. Furthermore, private citizens voluntarily *established* an information repository (via Google Maps) and *compiled* the inputs into a coherent, useable, visual tool that was able to aid law enforcement—a tool that was likely more immediately useful than the barrage of 911 calls that came in. This event suggests that there are more efficient, more effective, and more interactive ways for officials to collaborate with the public than log jamming inputs through overwhelmed 911 call centers—especially during large-scale events. There is already a great deal of attention being focused in this area, but the homeland security enterprise has yet to integrate existing social networking technologies in any meaningful way.[64] Until it does, the importance of individuals will remain artificially diminished from what is otherwise currently possible.

The PDX case also illustrates, to some extent, the collective potential of a group of citizens reporting on what they have seen or heard, especially in an urban area. In this case, it was the sound of an explosion. In other cases, it could be coordinated attacks of violence across a major city, the specific effects of a natural disaster, or even the characteristics of a suspicious individual or object in a public place. When multiple different, but specific, inputs are collected and categorized by location and description, a greater, more actionable picture is possible than if inputs are considered one-at-a-time, as items in a list. The gathering of individual inputs to a single composite map proved particularly effective in the Portland case, but would not have been possible without the

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[64] Jody Woodcock, "Leveraging Social Media to Engage the Public in Homeland Security" (master's thesis, Naval Postgraduate School, 2009); Laurie J. Van Leuven, "Optimizing Citizen Engagement during Emergencies through use of Web 2.0 Technologies" (master's thesis, Naval Postgraduate School, 2009); and James Carafano, *Social Networking and National Security: How to Harness Web 2.0 to Protect the Country* (Washington, DC: The Heritage Foundation, 2009), http://www .heritage.org/research/reports/2009/05/social-networking-and-national-security-how-to-harness-web-2-0 -to-protect-the-country (accessed November 12, 2010).

individuals who provided the inputs. Technology speeds the delivery of information from individual citizens, enables more individuals to communicate immediately, increases the quality of the data communicated, and enables rapid compilation and categorization of data, thereby making actionable composite pictures possible.[65] Technology, therefore, has the *potential* to multiply the collective importance of individuals in homeland security. Nonetheless, the individuals themselves are the resource needed, in many cases, to build useful composite pictures for homeland security officials.

Finally, the PDX example hints at something greater for the role of individuals than what the current enterprise seems to envision. The focus for homeland security officials trying to engage citizens has been primarily limited to the resilience-building aspects of citizens preparing to take care of themselves and their families in disaster scenarios.[66] "Vigilance" and "awareness" are considered *additional* roles. Overwhelmingly, the expectation has been for individuals to take care of themselves and for the rest of the enterprise to take care of everything else. Certainly, the impact of individual preparedness on societal resilience cannot be overstated. Additionally, preparedness is a role that requires a voluntary commitment from individuals that is difficult to obtain on any widespread level, as we shall see in the next chapter. It will require continual emphasis for as long as there are hazards present. However, the PDX Boom phenomenon seems to suggest that individuals might be capable of (and interested in) a much more interactive role. The case in Portland highlighted the collective potential for voluntary individual actions to be used in a way that the current enterprise is not seriously considering.

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65 Imagine several individuals able to instantly upload pictures or video of a would-be bomber to a well-known "civil security" web application with just a few switch activations on their smart phones. The application would automatically collect, categorize, and locate inputs, display some form of composite picture of the situation to dispatchers, and alert the nearest law enforcement officials. This could occur in less than a minute, but would not be possible without the technology, or voluntary participation of citizens. Both resources are currently available, but such a system is yet to be implemented. Note: "civil security" is a term, akin to "civil defense," that was proposed by homeland security specialist, Amanda Dory, in 2003 (Dory, "American Civil Security").

66 U.S. Department of Homeland Security, Quadrennial Homeland Security Review, A-8.

5.   Conclusions

From just a few brief examples, we can draw some key lessons on the roles and importance of individuals within homeland security. First, it is plain that individuals are *not* capable of single-handedly conquering the greatest threats. Response to large-scale attacks and disasters, like 9/11 and Hurricane Katrina, requires resources only available through federal, state, local, and non-governmental organizations. Preparedness in these cases is important, and *will* save lives, but preparedness alone will not significantly mitigate the blow dealt by the greatest catastrophes—that is, preparedness will not have a decisive effect on overall response operations. However, a capability that saves *any* additional lives, at such a low cost, is an important one.

Second, while individuals will always be a *supplemental* resource in dealing with large-scale tragedies, their ability to shape the outcome in a major way should never be underestimated. The passengers of United Flight 93 changed the outcome of 9/11 significantly.   The 50,000 volunteers who assisted Hurricane Katrina evacuees in Houston changed the outcome for over 25,000 New Orleans residents. Many, many more volunteers can claim responsibility for speeding the recovery of communities all along the Gulf Coast. They were able to increase societal resilience. Their contributions were vitally important.

Finally, individuals play a much greater role than simply bracing for the next disaster. Most terrorist plots in the United States fail. Individuals are responsible for providing the first clues to such plots at least one quarter of the time. Everyday citizens are arguably every bit as important to counterterrorism as intelligence, federal, and state or local law enforcement. The Fort Dix plot is a typical example. Along the same lines, individuals can provide a level of detail to the homeland security picture that no other resource can match. When citizens are able and willing to participate in providing information to law enforcement officials, their collective potential is greater than any other resource we have.

Apart from the importance of specific actions that can be taken by individual citizens, however, individuals possess an even greater potential to affect the homeland security enterprise—one that is generally not recognized or acknowledged by homeland security officials. The effects of preparing emergency kits, reporting suspicious activities, practicing safe computing, or volunteering with the fire department are all tangible. These effects can, in many ways, be measured or directly observed. For example, local planners could determine how many additional citizens would need to take individual preparedness measures in order to free up ten emergency responders during a particular crisis within a given locale. Experts could estimate the net effect on traffic flow if a city was able to realize a 20 percent increase in compliance with specific evacuation and shelter-in-place orders following a WMD attack. These are the effects that homeland security officials are striving to achieve—accomplishment of mission objectives and specific, measureable goals. However, the overall impact of pervasive individual involvement in homeland security efforts would also have an intangible component. It is this element that might have the greatest influence on homeland security—that might effectively *energize* the entire enterprise.

C. THE HIDDEN POTENTIAL

To quantify, in some way, the additive effect of specific individual contributions to homeland security would itself demonstrate the great importance of individual citizens, but it would not paint the entire picture. Something else happens when a citizenry decides to engage in a particular endeavor. The result is greater than the sum of calculable benefits. When engaged, citizens no longer just contribute to the prescribed solution to a problem; they begin to *shape* the solution. With homeland security, there exists the potential for involved citizens to invigorate the entire enterprise—to not only strengthen it, but to *mold* it, both directly and indirectly. The collective potential of U.S. citizens is not to just play a role within homeland security, but to *own* it, and to assume responsibility for it in the ways that one would expect of "the ultimate stakeholder."

Citizens have the potential to energize the homeland security enterprise along two primary paths: direct and indirect. The direct path includes all the overt ways in which citizens are able to make direct inputs into homeland security policy. It is best described by the principles of *direct citizen participation*—the idea of citizens participating *directly* in their government. The indirect path includes the subtler ways in which citizens are able in influence homeland security—as explained namely by *public choice theory*. Both paths lead individuals toward realizing enterprise-level changes in homeland security.

1.   Direct Citizen Participation

The great call issued by DHS is to "empower" Americans to contribute to homeland security. However, there are two operative definitions for the word "empower" and they have drastically different implications:

- To enable or permit
- To give power or authority to; authorize, especially by legal means[67]

The first definition describes empowerment as granting *permission*—such as a father *letting* his son borrow his car. The car belongs to the father, but the father has empowered the son by *enabling* him to use it. The son's power has increased because he has been permitted to use the car, but the father maintains ownership of the car and is the ultimate authority over the *how* the car will be used. The second definition describes empowerment as granting *authority*—such as a father adding his son's name to the car's title. The car belongs to both the father and the son, and the son is empowered because he shares *ownership* of the car and has legal *authority* to decide how the car will be used. When the homeland security enterprise provides tools and opportunities for citizens to *participate* in homeland security activities, it is empowering individuals in the first sense of the word. Direct citizen participation, on the other hand, empowers citizens by giving them authority to *decide*, on some level, what those homeland security activities will be.

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[67] *Dictionary.com*, s.v. "empower," http://dictionary.reference.com/browse/empower (accessed November 14, 2010).

Direct citizen participation has been defined as "the process by which members of a society (those not holding office or administrative positions in government) share power with public officials in making substantive decisions related to the community."[68] Said another way, it is citizens participating in the "political, technical, and administrative decisions" that will affect them.[69] Direct citizen participation is then, by nature, primarily a local phenomenon. Yes, citizens often participate in direct democracy at the state level through such mechanisms as initiatives and referenda, but here their choice of inputs is quite limited. They can choose to approve a particular bill or to reject it. Once a specific bill is on the ballot, "yes" or "no" are the only direct inputs citizens are empowered to make. However, on the local level, direct citizen participation can be a great deal more empowering and easier to implement.

Consider the federally funded programs starting in the late 1940s that empowered citizens through local advisory councils. The Housing Acts of 1949 and 1954 *required* citizen participation in urban renewal and juvenile delinquency projects through public hearings and local committees. The Community Action Program, established in 1964, called for "maximum feasible participation" in decision-making by "residents of the areas and members of the groups served." Head Start and Legal Aid, begun in the 1970s, enlisted "local poor people" to develop and administer the programs. Two features defined the great number of citizen participation programs (137) started in the 1970s: national-level funding and local-level programming and execution. Nancy Roberts, who has compiled a remarkable anthology on direct citizen participation in the course of her own research, described the level of participation in these programs thus, "the locus of implementation was in the neighborhood with ordinary citizens exercising varying degrees of control depending on the community and its citizens." This kind of participation allowed local citizens to apply federal dollars and guidelines to programs and plans that they formed and executed.[70]

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[68] Nancy C. Roberts, "Direct Citizen Participation: Challenges and Dilemmas," in *The Age of Direct Citizen Participation*, (Armonk, NY: M.E. Sharpe, 2008), 5.

[69] Ibid., 3.

[70] Ibid., 8–9.

What makes the effectiveness of direct citizen participation so promising for homeland security is the local nature of viable threats. Due to the diversity of the United States, there is no one-size-fits-all approach to domestic security or disaster response. It could be argued that there are a basic set of individual competencies required to mitigate "generic" national-level threats, like "terrorism" or "natural disasters," but more effective risk assessment and response measures are achieved when threats are considered from the local level first, than when they are approached from the national level and filtered down. Local citizens, when included in homeland security decision-making, offer a source of information, innovation, as well as collective wisdom that are inaccessible through strictly "official" channels.[71] This aspect can prove crucial to the efficient allocation and utilization of limited resources. For example, in Riverside, California, the highest risks to the community might hypothetically come from the threats of wildfires and earthquakes. If this were true, it is likely that many in the community would have already dealt with at least one of these. Certainly, federal, state, and local government resources in the forms of expertise, equipment, and funding are important for countering these community-specific threats. However, no one knows better the impact that mitigation and response policies will have on individual citizens than the citizens of Riverside. Sound "generic" wildfire response measures may not apply perfectly to Riverside due to some peculiarity of the city, for example. Everyday citizens may recognize mismatches that emergency management professionals do not, in some cases. Having the citizens share responsibility in *creating* response plans would generate better plans. Direct citizen participation would also better educate citizens on the reality of the threats—thereby increasing their incentive to prepare, and on the tasks of emergency responders—thereby facilitating more efficient response operations.[72]

From the national-level, lessons learned can be compiled and brought to bear on local planning, but the way citizen "buy-in" is achieved is through some amount of citizen *ownership* of the product—in this case, homeland security. Threat mitigation and emergency response are, by nature, local activities. Due to the vastness and diversity of

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[71] Roberts, "Direct Citizen Participation," 11.

[72] Ibid., 10–11.

the United States, these activities necessarily rely on the efforts of local residents, and they are made more effective when these individuals participate from the start. The result of direct citizen participation is greater citizen engagement and better homeland security.

2. The Influence of the Engaged Citizen

The indirect way in which the individual is able to energize the enterprise is through his or her influence on other members of the enterprise. Specifically, individuals actively engaged in homeland security have the unique capability to indirectly influence their governments, the private sector, and other individuals. We will treat each entity in turn.

First, we must establish at least a working definition of an "engaged citizen." For the purposes of this discussion we will consider individuals to be engaged in homeland security when they

- Prepare for emergencies by
    - Ensuring they understand the threats and hazards where they live, and the impact they might have on their families, their homes, their workplaces, and their communities
    - Reducing hazards around their homes and workplaces
    - Preparing threat/hazard-appropriate emergency kits and family emergency plans
    - Knowing how to receive warnings in the event of an attack or natural disaster
    - Knowing how to obtain risk information if or when it is not provided by government officials
    - Practicing what to do in an emergency at home and at work
- Learn how to recognize suspicious individuals and objects, how to respond, and how to report them
- Maintain vigilance and awareness of their surroundings based on known threats and hazards
- Learn and apply sensible personal, property, and cyber security principles at home, at work, and while traveling
- Understand the concept of resiliency and why it is important for them to be able to recover quickly after disaster strikes

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These traits are inarguably ones that homeland security officials and other experts would support; many of them are ones we know they are actively trying to achieve throughout the population.[73] If these characteristics seem overly ambitious, remember that this section intends to convey the *potential* of the individual to affect the enterprise, not the *likelihood*. That discussion will be saved for a later chapter. The purpose in listing these traits here is not to suggest policy, but to create an image of the type of citizen upon which this potential is based, as a frame of reference for the following discussion.

a.   *Influence on the Government*

We examined the potential for individuals to influence government policy directly by participating in its formulation. We determined that this kind of participation in homeland security would be most practical, but also most effective, at the local level, based largely on the local nature of most threats. However, citizens also have ways to shape government policy more indirectly by communicating their preferences. There are two means of doing this: (1) voting and (2) communicating with government officials directly or indirectly.[74] To examine the influence of citizens on government policy in these ways, we turn to a substantial literature known as *public choice theory*.

Public choice theory, in its broadest sense, is the application of the methods of economics to the field of politics.[75] Duncan Black is widely considered the founder of modern public choice theory with his development of the well known "median voter theorem" in 1948.[76] Anthony Downs expanded on Black's concept and developed a more comprehensive behavioral model to explain the interactions between citizens and

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[73] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, A-8, and Amanda J. Dory, *Civil Security: Americans and the Challenge of Homeland Security* (Washington, DC: Center for Strategic and International Studies, 2003), ix.

[74] Examples of indirect communication might include contributing to political lobbies or signing petitions, for example. These are ways in which citizens are able to communicate their preferences at (what they perceive to be) a much lower cost and with (perceived) greater effectiveness than direct communication. In evaluating cost, citizens consider not only financial costs, but also the costs in terms of any other resources they have in limited supply, namely time and energy (or level of effort).

[75] Dennis C. Mueller, "Public Choice: An Introduction," in *The Encyclopedia of Public Choice*, eds. Charles K. Rowley and Friedrich Schneider, Vol. I (New York: Kluwer Academic Publishers, 2004), 32.

[76] Duncan Black, "On the Rationale of Group Decision-Making," *The Journal of Political Economy* 56, no. 1 (February 1948), 23–34.

government in his classic, *An Economic Theory of Democracy*. As most economists, Downs based his model on the principle of *rationality*.[77] In this case—that is, in a representative democracy—the rational, self-seeking behavior of individuals is the determinant of whether citizens will vote (or otherwise try to influence government), how they will vote, and whether elected officials will govern according to citizens' preferences. The model relies on two basic premises:

- In politics, a citizen's decisions on (1) *whether* to engage and (2) *how*, specifically, to engage are determined by which alternatives yield him the highest *utility*, or greatest personal benefit.[78]

- When the government (at any level) makes policies, it does so in order to please as many voters as possible by matching policies to voter preferences.[79]

Based on these concepts, Downs' well-developed model of representative democracy reveals that government policies are determined, to a significant extent, by citizens' political decisions, as one might hope. The decision that has the greatest influence on government policy is the citizen's decision to become politically informed. Downs concludes that the "well-informed have a strong influence in determining what policy government will follow."[80] Since governments dictate homeland security policy on the federal, state, tribal, and local levels, we can conclude, then, that well-informed citizens have a "strong influence" on the homeland security enterprise through political means.

Applying Downs' model to homeland security, we can easily deduce that, in order for citizens to influence a government's *homeland security* policy, citizens must be well informed regarding homeland security matters. In addition, however, the government must be aware of these citizens. Specifically, the following three things must be true:

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[77] For a detailed discussion on rationality as it pertains to the model, see Anthony Downs, *An Economic Theory of Democracy* (New York: Harper, 1957), 4–11.

[78] Ibid., 36–37, 238.

[79] Ibid., 247.

[80] Ibid., 248.

- Citizens must know the specific homeland security policies that affect them
- Governments must know which citizens are affected by these specific homeland security policies
- Governments must know which citizens *know* they are affected by these specific homeland security policies[81]

In other words, citizens must be informed not only of the fact that they are personally affected by the governments' policies, but also which policies have the effects. In addition, governments must be aware of these citizens before they will alter policy.

The ability of the informed citizen to influence homeland security policy hinges, then, on two critical individual decisions: (1) the decision to *become* well informed—because it will not happen on its own—and (2) the decision to take some sort of political action, either by voting or by communicating with government officials. Herein lies the difficulty, as we shall see in later portions of this thesis. However, the feasibility of having a well-informed citizenry to the extent required to influence homeland security policy does not change the conclusion that such a citizenry would have a strong influence on the homeland security enterprise. In the absence of politically informed citizens, however, individuals can still exert great influence on the enterprise through non-political means.

b. *Influence on the Private Sector*

The government is able to directly influence the private sector through regulation and incentives, as a matter of homeland security policy. However, we said before that (politically) well-informed citizens tend to have a strong influence on government policy. It would seem, then, that well-informed citizens engaged in homeland security would have an interest in influencing policy that regulates the private sector to ensure better security practices, especially where critical infrastructure is concerned. However, when the private sector's profits are at stake, individuals will have a hard time competing for government influence. This is because companies have a great

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[81] Anthony Downs, *Economic Theory of Democracy*, 249. For a detailed discussion of the rationale, see ibid., 238–259.

deal more resources than individuals do. Large corporations, in particular, can afford to devote some of their resources to creating *teams* of experts in relevant areas of government policy. It is in their best interest to do this because it is the only way they can influence policy-makers to adopt policies that protect (or even boost) their profits. It is impossible for an individual to bear the costs required to become informed to the same level of detail, let alone bear the costs required to communicate preferences as effectively as companies are. Therefore, the individual has little chance of exerting more influence on government policy than the private sector. Downs highlights a great example of this in the way consumers-at-large are generally unable to sway any policy decisions that affect them: "For instance, legislators are notorious for writing tariff laws which favor a few producers in each field at the expense of thousands of consumers."[82] The engaged individual's potential to influence the private sector does not reside in the political arena, no matter how well informed.

Apart from politics, however, engaged citizens are able to shape the private sector from within. Their great potential to influence is inherent in the fact that the vast majority of Americans make their living as owners or employees of the private sector. When owners and managers are engaged in homeland security in their private lives, they are more likely to be proactive in learning the threats and hazards faced by their businesses, and the impact implied by those threats and hazards. More crucially, they are more likely to understand the concept and importance of resilience. Even when motivated by nothing more than maximizing profits, it is rational for such business leaders to incur costs to defend or mitigate risks to their own infrastructures and resources (including people) in order to continue some level of business operations during an attack or disaster, or optimize their ability to resume operations afterward.[83] This idea is the essence of resiliency, a core concept that homeland security officials are striving to foster throughout the enterprise. Furthermore, one can hope that proactive business leaders

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[82] Anthony Downs, *Economic Theory of Democracy*, 255.

[83] Such costs might include those required to physically protect key resources and infrastructures, build redundancy into key infrastructures, diversify supply sources, institute cybersecurity mechanisms, and ensure preparedness of employees, for example.

would also have an appreciation, and at least a secondary concern, for the impact that a major interruption in their firms' operations would have the on the economy at large and within their local communities.

To many, realization of this potential would seem highly improbable. Firms *are*, in fact, naturally motivated by profit and, to the extent that they are in competition with other firms, are unlikely to willingly bear such costs. If they do, and their competitors do not, they are forced to raise prices and lose at least some share of the market, or they are forced to sacrifice profit, or both.[84] To get through this problem requires owners and majority shareholders to decide to make this sacrifice, which they are unlikely to do, or to cooperate with competitors to ensure that each bears the cost of resilience. Currently, government regulations and incentives make up for where such cooperation lacks in protecting critical infrastructure and key resources (CIKR). Often government regulations encourage intra-industry cooperation; firms want to develop more efficient ways to achieve security objectives and then influence the government to curb costly regulation. The voluntary Sector Coordinating Councils (SCC) established by the federal government in the National Infrastructure Protection Plan has helped to encourage such cooperation in CIKR sectors and, thus realize the potential for individuals to strengthen the enterprise in this way.[85]

To a lesser extent, *all* engaged citizens employed by the private sector have an ability to invigorate homeland security. When employees have been proactive in preparing for emergencies, their planning enables them to better manage hardships, take care of their families, and more quickly recover from attacks or disasters. This means that they are also able get back to work sooner following a major interruption in their lives. This is especially critical, again, for those industries that rely on them to operate the country's critical infrastructures or produce or manage key resources. Any advantage here multiplies the nation's resilience from major disruptions. Additional influence

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[84] This speaks to the problem of *collective action* that will be discussed further in Chapter IV.

[85] U.S. Department of Homeland Security, *National Infrastructure Protection Plan: Partnering to Enhance Protection and Resiliency* (Washington, DC: Government Printing Office, 2009), 52.

engaged citizens have on the private sector is encouraging employers to maintain preparedness in the workplace, including taking evacuation and shelter-in-place drills seriously. Many will also have a positive influence on their coworkers.

c. *Influence on Other Citizens*

Perhaps the greatest potential engaged citizens have is the ability to influence those around them. Often we may not realize the effects we have on other people, but a number of literatures show that our day-to-day contacts have a remarkable effect on our knowledge, our beliefs, and our behaviors. Borrowing from Downs' own research, we learn that, in politics, people obtain most of the "free information" that they use to make decisions from personal contacts.[86] In particular, an extensive study into how people made their voting decisions prior to an election indicated that personal relationships were more influential than mass media.[87] For those who were undecided, conversations with others ultimately swayed them in most cases. Personal influence was even more important for those who were uninterested—who were not planning to vote, but who eventually changed their minds. Three-fourths of the respondents in the study indicated that personal influence as a factor in their decision. After the election, voters who had made some change from their original position indicated that friends or family members influenced their final decision more often than those who had made no change.[88] While this study was limited to the effects of personal influence on voting behavior, we might hypothesize that other types of behavior would be particularly influenced by personal relationships as well—especially for those who are still "open to influence"—the undecided and uninterested.[89]

The transfer of information and the influence of personal opinion seem logical results of our many interpersonal contacts each day. However, there are some other results that may be a bit more surprising. In the vast literature on social networks,

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[86] Downs, *Economic Theory of Democracy*, 222.

[87] Paul F. Lazarsfeld, Bernard Berelson and Hazel Gaudet, *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign*, 2nd ed. (New York: Columbia University Press, 1948), 150.

[88] Ibid., 151.

[89] Ibid.

one area of research has shown strong correlations between individuals' social contacts and particular outcomes in their lives. For example, in addition to voting, researchers have shown social connections to affect smoking habits, alcohol use, happiness, depression, sleep loss, employment prospects, group performance, altruism, and even weight gain.[90] These correlations are even found with up to three degrees of separation. One study, for example, showed that if you were a non-smoker, but a friend of your friends' friends was a smoker, then you would be 11 percent more likely to smoke.[91] The findings in this field clearly suggest the power of "setting an example"—even for people who may never meet you! The related literature of social learning in empirical networks has shown that when people are not sure what actions to take, they often turn to their personal relationships, especially their "close" ones, to help make their decisions.[92] The result, shown by way of mathematical theorems, is that beliefs and utilities of individuals converge over the long run.[93]

The influence of our interpersonal relationships on nearly every aspect of our lives is undeniable. In many ways, it seems like an obvious statement to say that people have an effect on each other. Research, however, suggests that an individual's influence on others may extend beyond what is obvious, to those with whom he or she never comes in contact. At a minimum, the research shows that engaged individuals have a tremendous potential to influence those around them, just by the fact that they interact.

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[90] Nicholas A. Christakis and James H. Fowler, *Connected: The Surprising Power of our Social Networks and How They Shape Our Lives* (New York: Little, Brown and Company, 2009), 49–54, 115–119. RN Rosenquist, JH Fowler, and NA Christakis, "Social Network Determinants of Depression," *Molecular Psychiatry* (March 16, 2010), 1–9, http://www.nature.com/mp/journal/v15/n12/pdf/mp201048a.pdf (accessed November 21, 2010). Sara C. Mednick, Nicholas A. Christakis, and James H. Fowler, "The Spread of Sleep Loss Influences Drug Use in Adolescent Social Networks," *PLoS ONE* 5, no. 3 (March 2010), 1–8, http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0009775 (accessed November 21, 2010). Nicholas Christakis and others, "An Empirical Model for Strategic Network Formulation" (Working Paper 16039, NBER Working Paper Series, National Bureau of Economic Research, Cambridge, MA, 2010), http://www.nber.org/papers/w16039.pdf (accessed November 21, 2010). Matthew O. Jackson, *Social and Economic Networks* (Princeton, NJ: Princeton University Press, 2008), 334–353. Christakis and Fowler, *Connected*, 105–112, 296–300.

[91] Nicholas A. Christakis, "The Dynamics of Personal Influence," Harvard Business Review, http://hbr.org/web/2009/hbr-list/dynamics-of-personal-influence (accessed November 21, 2010).

[92] Sanjeev Goyal, *Connections: An Introduction to the Economics of Networks* (Princeton, NJ: Princeton University Press, 2007), 87–88.

[93] Ibid., 94–95.

It would seem that a citizen engaged in homeland security would be especially influential for those who are unknowledgeable about what is expected, or still "on the fence" about homeland security in general. If preparedness and vigilance are part of a citizen's daily life, there is reason to believe that similar behaviors and attitudes will "spread" to those around him, especially to those closest to him.

D.   CONCLUSIONS

The rhetoric of national leaders, homeland security officials, and experts alike seems unanimous: individuals are a critical provider of homeland security. Individuals have now been formally recognized as having responsibilities in both national security and homeland security. However, we would not expect to hear anything to the contrary, even if it were true. The message from our leadership deserves validation.

If individuals really have an important role in homeland security then past incidents should bear it out. In fact, they do. Where individuals have failed to prepare, we have paid an undeterminable price. We can safely reason, based on reports, that more lives would have been saved on 9/11 and with Hurricane Katrina if more people had taken preparedness seriously. At the same time, the efforts of individuals in these tragedies also proved vital. The passengers on United Flight 93 did what no other homeland security entity could have done. The more than 50,000 volunteers who aided recovery from Hurricane Katrina were irreplaceable assets. Individuals have arguably contributed to as many foiled terrorist plots in the United States as any other component of the enterprise. Finally, individuals have shown the potential to involve themselves without prompting and provide an aggregate picture that no other agency could practically provide—at least not persistently on a national level.

Despite the critical contributions made to established homeland security missions, there exists an even greater potential to affect the entire enterprise. Through direct participation on the local level, individuals have potential to create better policies. Indirectly, through the mechanisms of representative democracy, informed citizens are also able to shape policy through their influence on the government. All working

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Americans have the potential to influence the private sector, if engaged in homeland security. Perhaps an individual's greatest influence, however, is on other individuals with whom he interacts on a daily basis, especially those closest to him.

Whether individuals are the *greatest* homeland security resource is, admittedly, arguable. This chapter contends that they are—or at least have the *potential* to be. However, even for those who would disagree with their placement in the hierarchy of important resources, the significance of the American citizen's *intended* role, as outlined by the Department of Homeland Security, is undeniable.

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III. HOMELAND SECURITY'S MOST LATENT RESOURCE

One crushing fact beleaguers nearly every national endeavor: there are not enough resources to dominate the objective. Faced with the enormity and complexity of protecting a sizable and diverse nation of over 300 million from *all* hazards, to say that the homeland security enterprise is plagued by limited resources would be an understatement. It certainly cannot afford to waste what resources it has.

The enterprise must therefore take stock of how efficiently it uses resources. Since individuals are arguably its *greatest* resource available, this chapter assesses their level of engagement. The findings are not good. If citizens truly are homeland security's greatest resource, then they are also its greatest waste. Officials seem to be aware of this, though, and over the last seven years have taken major steps to correct the deficiency, namely through information awareness campaigns. Still "the needle" has not significantly moved.[94] After laying out the enterprise's current approach to getting Americans engaged, this chapter will argue that awareness is not enough—that the enterprise is overlooking a fundamental reason for citizen nonparticipation, for the latency of homeland security's greatest resource.

A. THE PROBLEM

1. The Call That Never Came

If ever there was a time that Americans would be expected to engage in protecting the homeland, it should have been immediately following the horrific attacks of 9/11. The events of that day were felt in every corner of American society, and even in many parts of the world. As expected when faced with an outside threat, the 9/11 attacks resulted in "immediate, visibly evident increases in expressions of national identification

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[94] Annemarie Conroy, "Move the Needle," iii.

and unity throughout the United States."[95]   It was a time of intense patriotism that seemed ripe for an American "call to action."   However, some would argue that "the call never came."[96]

In President Bush's address on September 21, 2001, he claimed, "Americans are asking, 'What is expected of us?'"[97] In short, his answer was to "live your lives and hug your children … be calm and resolute." The President also asked the American people to uphold American values, "to support the victims" of 9/11, to cooperate and be patient with "the delays and inconveniences that may accompany tighter security," and to keep faith in the economy. Most would argue that Americans did all that their leader asked, even if begrudgingly yielding to TSA officials on the way to their destinations. Just as the President had hoped, it seemed in many ways, life in America would "return almost to normal."[98] Americans would go back their routines, making adjustments as necessary, and their national unity and patriotism were largely spent on angry resolve to defeat al Qaeda, support of the U.S. Armed Forces, and an otherwise passive display of "not bowing down" to the fear of terrorism by continuing to live normal lives. Homeland security—the current concept then in its infancy—may have missed its "golden" opportunity.

2.   Our Invincible Complacency

Then came Hurricane Katrina. If the United States missed an opportunity following 9/11, then the widespread devastation and impact of this tragedy would certainly rouse Americans to take personal responsibility in preparing for the worst. Post-Katrina surveys of the American public, however, would show otherwise. One study, conducted at the request of the Council for Excellence in Government and the American Red Cross, analyzed two samples of data: one collected in the days

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[95] Qiong Li and Marilynn B. Brewer, "What Does It Mean to Be an American? Patriotism, Nationalism, and American Identity After 9/11," *Political Psychology* 25, no. 5 (October 2004), 728.

[96] Flynn, *Edge of Disaster*, 172.

[97] George W. Bush, address to a Joint Session of Congress and the American People, U.S. Capitol, Washington, DC, September 20, 2001, http://georgewbush-whitehouse.archives.gov/news/releases/2001/09/20010920-8.html (accessed November 23, 2010).

[98] Ibid.

immediately surrounding the landfall of Hurricane Katrina, but before the level of destruction was widely known; the other collected two months later. The analysis of these data yielded this remarkable conclusion:

> Throughout the history of this nation, Americans have learned from and modified or changed their behavior following disasters, both in response to a disaster and in their preparedness for what may lie ahead. Both personally and as a nation, we have always mobilized to respond. Given this shared history, the most remarkable finding to emerge from this study is that Americans' response to Hurricanes Katrina and Rita—indeed even to September 11, 2001—is *nearly nonexistent* in terms of their personal preparedness for disaster. *The lessons the public learned from these most recent disasters appear to be extremely limited.*[99]

Another study, also conducted two months after Hurricane Katrina struck the Gulf Coast, revealed that only 22 percent of Americans felt they were prepared for a terrorist attack and 31 percent felt prepared for a natural disaster (Figure 2).[100] Aside from not *feeling* prepared, the more objective data in the survey revealed that Americans were *not* prepared. Forty-three percent of Americans reported having an emergency plan, 46 percent had an emergency kit, and only 17 percent had both a *complete* emergency plan and a *complete* emergency kit.[101] Over half of Americans said they intended to rely heavily on local emergency responders in case of disaster. Almost one-third expected to rely on state and federal agencies.[102] Just under two-thirds of working Americans reported being familiar with emergency plans at their workplace. Less than half of parents were familiar with the emergency plan for their children's school. Even fewer Americans had knowledge of their community or state emergency plans. Of those

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[99] Peter D. Hart Research and Public Opinion Strategies, *The Aftershock of Katrina and Rita: Public Not Moved to Prepare* (Washington, DC: Peter D. Hart Research Associates, 2005), 2, http://www.volunteerwv.org/CERV/news/aftershock.pdf (accessed November 22, 2010). Emphasis added.

[100] ORC Macro, *Post-Katrina Survey on Household Preparedness* (Calverton, MD: Macro International Inc., 2005), 3–4, http://www.macrointernational.com/ORCMacroPreparednessSurvey.pdf (accessed November 22, 2010).

[101] Ibid 4–5. "Complete" is not intended to imply "comprehensive" in either case. Complete emergency plans were ones that included discussing with family members the place they intended to meet if unable to communicate. Complete emergency kits were to include food and water supplies, a flashlight, a battery-powered radio, spare batteries, and a first aid kit.

[102] Ibid., 6.

Americans who did have appropriate information on what to do in an emergency, just half indicated that they or someone in their family had participated in an emergency drill at school, at work, or in the community.[103]
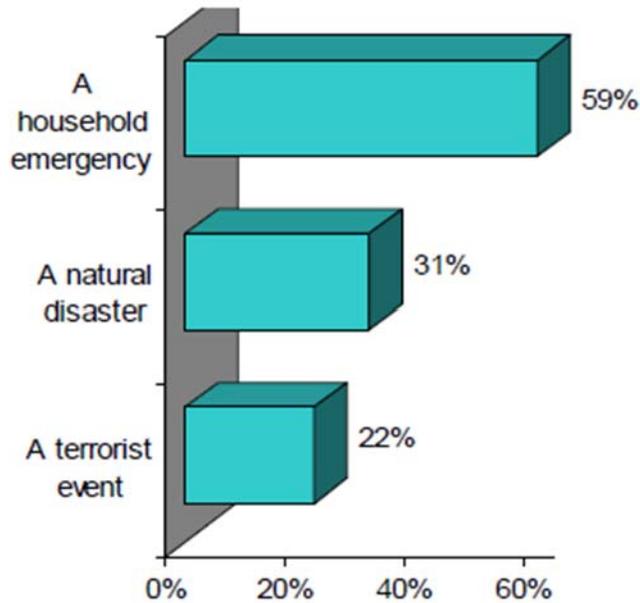
Figure 2.   Perceived Preparedness[104]

Clearly, Americans, at that time at least, were predominantly unprepared to deal with crises such as terrorist attacks or natural disasters. What is more telling about the challenge of garnering citizen support, however, is that most underprepared Americans did not intend to do anything about it. Even after seeing the devastation of Katrina, the percentage of Americans who admitted doing absolutely *nothing* to prepare for disasters had only decreased from 42 to 36 percent.[105]   Only 31 percent of Americans were considering building an emergency kit, while just over 20 percent considered coming up with a family communication plan for making contact with each other during emergencies.[106]

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[103] Peter D. Hart Research and Public Opinion Strategies, *Aftershock of Katrina*, 7–8.

[104] From ORC Macro, *Post-Katrina Survey*, 4.

[105] Peter D. Hart Research and Public Opinion Strategies, *Aftershock of Katrina*, 4.

[106] Ibid., 5–6.

At first, it seems ironic that most Americans at this time *felt* unprepared, *were* unprepared, and yet did not intend to *get* prepared. Either that or it shows a lack of concern or awareness. When you consider that Americans also reported being more worried about gas prices than terrorism and natural disasters combined (Figure 3), their intentions might actually align with their concerns, even if the hierarchy of concerns seemed irrational.[107] At the time of the surveys, America had not only seen peak gas prices, but also major hurricanes, millions of worldwide deaths expected from bird flu, a devastating earthquake in Pakistan and India, major flooding in the Northeastern United States, and terrorist threats to the New York City subway and one of the Baltimore tunnels (Figure 4).[108] Yet, by a wide margin, the concern over gas prices dominated all others.
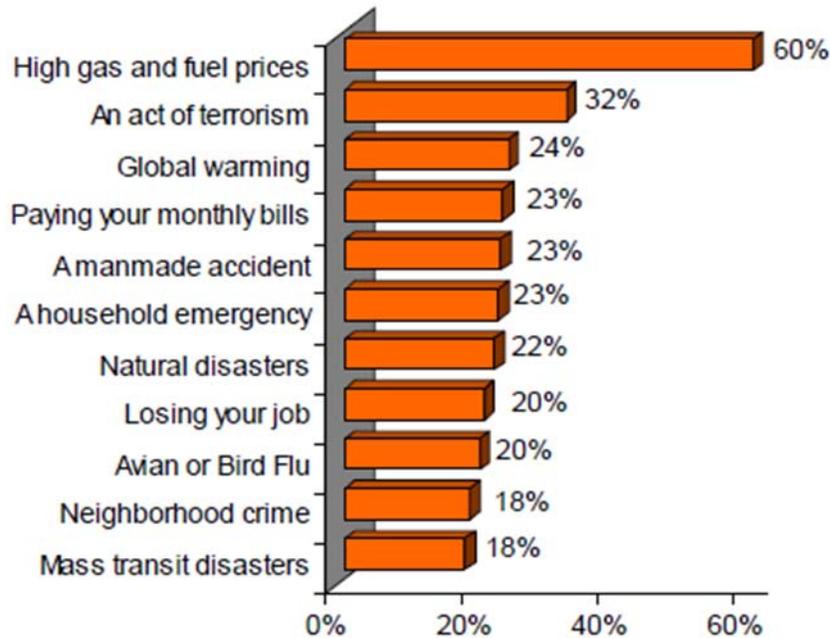
Figure 3.   Percentage of Americans Worried[109]

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[107] ORC Macro, *Post-Katrina Survey*, 2.

[108] Ibid., 1.

[109] Ibid., 2.
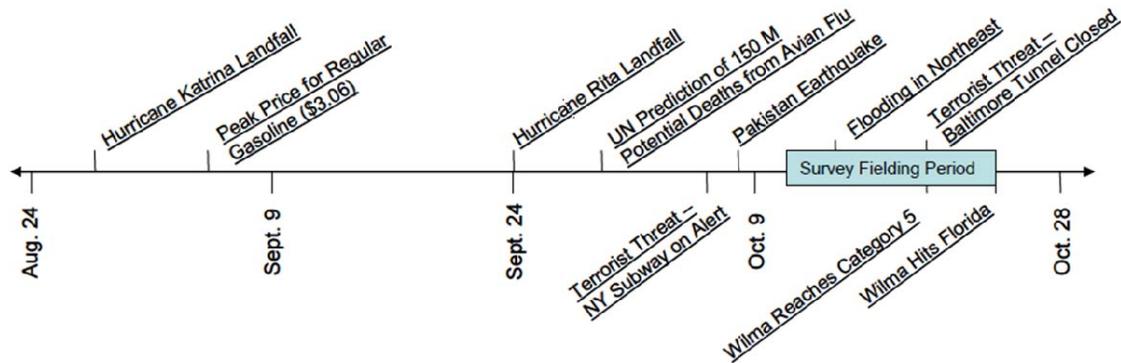
Figure 4.   Context of the Survey[110]

Furthermore, when you consider some of Americans' reasons for not preparing, it makes sense that they would not intend to change anything. Most people (54 percent) indicated that one reason they chose not to prepare was that they did not believe they would be personally affected by a disaster. Over half (52 percent) said they had just not *thought* about it. Almost half (45 percent) of Americans said that they elected to remain underprepared because they believed that nothing they could do would really make a difference if they *were* affected by disaster.[111] It would seem, then, that either the experts are wrong, or many Americans are living in denial or ignorance about the potential for disaster to strike them.   Stephen Flynn offers this harsh assessment of American preparedness:

> Preparedness is not about being paranoid. It is about being smart. But too many Americans are acting dumb. In surveys, the vast majority of us say that we believe preparedness is important but most of us are doing nothing concrete to act on that belief. Most Americans pay so little attention to their surroundings that they are unaware they are living in areas that are at high risk for a disaster, when in fact 91 percent of us are.[112]

Fortunately, there is also good news within these surveys. The willingness of Americans to volunteer is unquestionable. The immense recovery effort from Hurricane Katrina showcased Americans' willingness to help others, in particular. Americans have long shown a sense of selfless service and national unity in *response* to tragedy.

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[110] From ORC Macro, *Post-Katrina Survey*, 1.

[111] Peter D. Hart Research and Public Opinion Strategies, *Aftershock of Katrina*, 6–7.

[112] Flynn, *Edge of Disaster*, 173–174.

Remarkably, though, despite being underprepared themselves, almost 60 percent of Americans indicated they would be willing to take a more proactive role by volunteering to support homeland security efforts within their communities. Furthermore, almost one-third said they would be willing to give one hour per week to these efforts.113 It would seem that the desire of Americans to support others exceeds their desire to prepare themselves. Ironically, we may be doing more harm than good by helping each other before taking care of ourselves—or perhaps this is not so ironic. For those who have flown commercially, this might be analogous to placing your oxygen mask on yourself before assisting other passengers. It is difficult to help others when you, yourself, are incapacitated. This country is fortunate to be large enough to draw from the altruism of those regions not affected by disaster.

The statistics from 2005 indicate that, even after the trauma of Hurricane Katrina, Americans (1) did not *feel* prepared, (2) were *not* prepared, and (3) *did not intend* to prepare for attacks or disasters. These surveys also tell us something about complacency. Specifically, they contradict the argument, at least in this case, that society tends to "slide back into" complacency as the memories of recent tragedies fade.114 Rather, they suggest that complacency is there all along—both before and after disasters—despite the psychological effects of watching the desperation and suffering of fellow Americans night after night on television.115 Almost forty percent of Americans actually admitted that Hurricanes Katrina and Rita did *nothing* to motivate them to prepare for an emergency.116 Fortunately, homeland security officials have recognized lack of citizen engagement as a significant problem, and have focused a great deal of attention on correcting it.

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113 Peter D. Hart Research and Public Opinion Strategies, *Aftershock of Katrina*, 4. The specific efforts addressed in the survey included planning, training, and practicing emergency drills at the community level.

114 Flynn, *Edge of Disaster*, 172.

115 Peter D. Hart Research and Public Opinion Strategies, *Aftershock of Katrina*, 3–9.

116 Ibid., 3. Of those who *had* taken some sort of action to better prepare themselves, 39 percent said that Hurricanes Katrina and Rita were their primary motivation, 27 percent greater than any other motivation.

B.   THE CURRENT APPROACH

1.   First and Foremost: Awareness

Derived from the lessons of Hurricane Katrina, the White House staff report directed, as one of two "immediate" priorities, the creation of a new "culture" in the United States. The Culture of Preparedness was to "stress initiative at all levels," but citizen and community preparedness was regarded as one of the most important means of terrorist attack prevention and "all hazards" resilience.[117] The report pushed for a more aggressive and substantive public awareness campaign to encourage citizen preparedness in the ways that "Stop, Drop, and Roll" and "Buckle Up America" had encouraged fire and auto safety practices.[118]

Therefore, the Department of Homeland Security got to work on spreading the message—or, more correctly, *continued* to work on spreading the message. Actually, the Federal Emergency Management Agency (FEMA) began the *Ready* campaign in February 2003. The program sought

> to reduce fears and provide information by providing individuals specific actions they can take to protect themselves, their families and their communities in the wake of an attack, or another emergency situation.[119]

The actions seemed simple enough: (1) build an emergency kit; (2) make an emergency plan; and (3) stay informed and aware. They were simple enough even to form a sort of mantra for people to remember easily: "READY: make a kit, make a plan, and be informed."120 It would seem to be just the right approach.

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[117] White House, *Hurricane Katrina*, 79.

[118] Ibid., 80.

[119] U.S. Department of Homeland Security, "Department of Homeland Security Launches Citizen Preparedness Campaign," U.S. Department of Homeland Security, http://www.dhs.gov/xnews/releases/press_release_0089.shtm (accessed November 23, 2010).

[120] Ibid. The slogan has since been modified to "Prepare. Plan. Stay Informed," with the steps now altered to "Get a kit. Make a plan. Be Informed" (Federal Emergency Management Agency, "Ready," Federal Emergency Management Agency, http://www.ready.gov/ (accessed November 23, 2010)).

In fact, less than two years after being initiated, the Ad Council had declared the Ready campaign "one of the most successful campaign launches in its 62-year history."[121] By November 2004, the awareness effort was able to boast a number of great successes:

- More than 210 million had seen or read about the campaign (regrettably, the author was not one of them).
- $310 million in media support had been donated.
- The website (www.Ready.gov) had reached more than 1.8 billion hits.
- The toll-free number (1-800-BE-READY) had received 214,180 calls.
- People had requested or downloaded more 3.6 million brochures.[122]

More importantly, however, surveys had indicated an initial increase in citizen preparedness. A September 2004 survey revealed the following figures:

- 58 percent of Americans had taken at least one action toward preparedness
- 10 percent increase (to 36 percent) in the number people with emergency kits
- 9 percent increase (to 24 percent) among those who had emergency plans
- An 11 percent increase (to 16 percent) in the number who had sought additional information about emergency actions.[123]

Despite the initial indications of progress, officials remained cautious, acknowledging it was "too early to effectively gauge the long term effects of the campaign on public preparedness."[124] For over seven years now, FEMA has partnered with the Ad Council in sponsoring public service announcements, promoting their website, and holding public events, as in "National Preparedness Month," to urge Americans to prepare. Although certainly a primary component, "awareness" has been only one aspect of the DHS effort. From the beginning, the department was directed to do more than just get the word out, but also to *integrate* citizens with their communities

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[121] U.S. Department of Homeland Security, "Fact Sheet: Ready Campaign," U.S. Department of Homeland Security, http://www.dhs.gov/xnews/releases/press_release_0561.shtm (accessed November 23, 2010).

[122] Ibid.

[123] Ibid.

[124] Ibid.

in preparing for attacks and disasters. The impetus for the department's efforts originates from Homeland Security Presidential Directive 8 (HSPD-8), issued in December 2003:

> The Secretary shall work with other appropriate Federal departments and agencies as well as State and local governments and the private sector *to encourage active citizen participation and involvement in preparedness efforts.* The Secretary shall periodically review and identify the best community practices for *integrating private citizen capabilities into local preparedness efforts.*[125]

Though the overall goal of HSPD-8 was "to strengthen the preparedness of the United States to *prevent* and respond" to all hazards, the focus on engaging citizens seemed, from the start, to be limited exclusively to response capabilities. Primary responsibility for achieving citizen participation, therefore, naturally fell to FEMA. We have surveyed some of FEMA's awareness efforts. A closer look at their other programs tells us almost everything we need to know about the federal government's *basic* framework for achieving greater citizen participation. That is the concern of this section and the remainder of this thesis—the federal government's *fundamental strategy* for getting individuals to take personal responsibility and to integrate with the rest of the homeland security enterprise, that their great potential might be realized.

2.   Organizing for Success

FEMA's citizen preparedness efforts are the responsibility of its Community Preparedness Division (CPD). The CPD houses two key supporting programs, the Citizen Corps Program (CCP) and its subprogram, the Community Emergency Response Team (CERT) Program. Through these programs, the functions of the Community Preparedness Division are to

- *Build a Culture of Preparedness.*
- Integrate government and non-government sectors at Federal, State, Tribal, local levels in all phases of emergency management.
- Integrate Community Preparedness in National Policy.

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[125] U.S. President, Homeland Security Presidential Directive/HSPD-8, "Directive on National Preparedness," *Weekly Compilation of Presidential Documents* 39, no. 51 (December 2003): 1795. Emphasis added.

- Develop and coordinate National Citizen Corps Council, Program Partners, and Affiliates.
- Support State, Tribal, Local Citizen Corps Councils.
- *Conduct research on citizen and community preparedness.*[126]

The first function is a nebulous one, to say the least. The idea of a Culture of Preparedness conveys a useful image, but that image is likely different for each person. The concept of building such a culture suggests an end state, but it is difficult to gauge when that state has been achieved. Unfortunately, for FEMA, the White House left that for them to figure out. Although the Katrina report offered "the new Culture" as a transformational "imperative," they never were able to succinctly define it; and in three pages describing the many things such a culture must *do*, the extent of their "remedies" to fix the problems of citizen preparedness from Hurricane Katrina were (1) to have prominent leaders "begin a public dialogue," (2) to build on and consolidate the existing awareness campaigns, and, (3) in general, "do more"—hardly a descriptive prescription for such a difficult problem.[127] Nevertheless, the term "culture of preparedness" pervades the discourse on public preparedness. Although this research never discovered a concise definition, it is likely that as long as surveys indicate there is room for improvement, the quest for the elusive "Culture" will continue. The risk of chasing this Culture indefinitely, however, is that the concept itself will begin to lose any meaning it currently has due to overuse.

Another relevant task of the CPD is to conduct research into citizen preparedness. This is done almost exclusively through survey data, often sponsored and compiled by the Citizen Corps. Surveys are probably the most efficient way to gather needed data. They are useful for assessing preparedness levels—showing us *what* we need to improve, but also for gauging public attitudes, especially motivations and hindrances to desired behaviors—helping us determine *how* we might improve. It is important to remember that no two surveys are the same, however, and all are subject to errors. To be useful,

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[126] Federal Emergency Management Agency, "Community Preparedness Division," Federal Emergency Management Agency, http://www.fema.gov/about/divisions/cpd.shtm (accessed November 23, 2010). Emphasis added.

[127] White House, *Hurricane Katrina*, 2. Ibid., 79–82.

analysis requires careful consideration of the sample characteristics, the specific questions asked, the methods used to ask the questions, the order the questions are asked, and how the data is reported. In one case, two surveys conducted with large samples of New York City residents attempted to determine what percentage of respondents had emergency kits. One survey reported 23 percent; the other reported 88 percent.[128] Typically, however, data between surveys has been found to be useful for obtaining a general assessment and identify significant trends. The Citizen Corps, in 2005, began highlighting the latest research developments in their *Citizen Preparedness Reviews*—a consolidated approach to periodically analyzing all recent survey results and the latest thematic focuses of research (e.g., youth preparedness education in Summer 2010).[129] As of July 2006, for example, the review reported having a database of 37 surveys related to individual preparedness.[130] A clear focus apparent in the reviews is ensuring careful interpretation of survey results.[131]

The Citizen Corps' work extends far beyond surveys and research. It is the principal volunteer organization for citizens interested in readying for all hazards. The mission of the Citizen Corps Program is

> to harness the power of *every* individual through *education*, *training*, and *volunteer service* to make communities safer, stronger, and better prepared to *respond* to the threats of terrorism, crime, public health issues, and disasters of all kinds.[132]

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[128] Federal Emergency Management Agency, "Methodological Considerations and Key Findings in Preparedness Research," *Citizen Preparedness Review*, no. 1 (Summer 2005), 5, http://www.citizencorps .gov/downloads/pdf/ready/citizen_prep_review_issue_1.pdf (accessed November 25, 2010).

[129] Federal Emergency Management Agency, "Bringing Youth Preparedness Education to the Forefront: A Literature Review and Recommendations," *Citizen Preparedness Review*, no. 6 (Summer 2010), http://www.citizencorps.gov/downloads/pdf/ready/citizen_prep_review_issue_6.pdf (accessed November 25, 2010).

[130] Federal Emergency Management Agency, "Patterns in Current Research and Future Research Opportunities," *Citizen Preparedness Review*, no. 3 (Summer 2006), 1, http://www.citizencorps.gov/ downloads/pdf/ready/citizen_prep_review_issue_3.pdf (accessed November 25, 2010).

[131] Federal Emergency Management Agency, "Update on Citizen Preparedness Research," *Citizen Preparedness Review*, no. 5 (Fall 2007), 3, http://www.citizencorps.gov/downloads/pdf/ready/ citizen_prep_review_issue_5.pdf (accessed November 25, 2010).

[132] Citizen Corps, "Citizen Corps Councils," Federal Emergency Management Agency, http://www.citizencorps.gov/councils/ (accessed November 25, 2010). Emphasis added.

At the time of writing, the Corps was comprised of 2,446 state, tribal, and local Councils, designed to plan and implement preparedness programs on the local level.133 It partners with five other federal organizations that focus on integrating volunteer citizens and professionals into specialized teams intended for real world scenarios: the Fire Corps, USAonWatch-Neighborhood Watch, the Medical Reserve Corps (MRC), Volunteers in Police Service (VIPS), and Community Emergency Response Team (CERT) Program.134

The second program assigned to the Community Preparedness Division, then, is CERT. The Community Emergency Response Team Program

> *educates* people about disaster preparedness for hazards that may impact their area and *trains* them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can *assist* others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are *encouraged* to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.135

Looking at each of these functions, missions, and descriptions is instructive of the government's strategy: *education*, *training*, *volunteer service*, *assistance*, *encouragement*. These components are inarguably essential to solving the problem of getting Americans to prepare. Education and training would address the large portion of the population that does not *know how* to prepare—54 percent of unprepared Americans according to one post-Katrina survey.136 Volunteer service would provide opportunities in which Americans seemed eager to participate, especially if they were able to assist others by doing so. Of course, encouragement would always be warranted, especially for

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133 Citizen Corps, "About Citizen Corps," Federal Emergency Management Agency, http://www.citizencorps.gov/index.shtm (accessed November 23, 2010).

134 Citizen Corps, "Partner Programs and Affiliates," Federal Emergency Management Agency, http://www.citizencorps.gov/partnersandaffiliates/ (accessed November 23, 2010).

135 Citizen Corps, "Community Emergency Response Teams (CERT)," Citizen Corps, http://www.citizencorps.gov/cert/ (accessed November 23, 2010). Emphasis added.

136 ORC Macro, *Post-Katrina Survey*, 7.

those who were unsure of whether preparation would make any difference. When tacked to an aggressive awareness campaign, these features would seem to make quite a well-reasoned, robust strategy. So how well has it worked?

C. THE PROBLEM WITH THE CURRENT APPROACH

1. Americans Not Listening

The White House called for a Culture of Preparedness primarily through reinvigorated awareness campaigns. After almost five years from the release of that report, no such campaign has emerged—at least in terms of success. Recent national preparedness surveys would indicate that the Federal Emergency Management Agency's (FEMA) "Ready" campaign has thus far been ineffective. FEMA's 2009 *Personal Preparedness in America* survey of 4,461 U.S. households indicated the following:

- More than 60 percent expected to rely on emergency responders (rather than themselves) within the first 72 hours after a disaster.

- Less than half expected to rely on others in their neighborhood in the event of disaster.

- Of the 57 percent who claimed to have stocked emergency kits at home, only food and water were mentioned by more than 42 percent of respondents when asked to list the items in their kits.

- Only 44 percent had an emergency plan for their home.

- Only 42 percent had participated in a workplace evacuation drill within the past year.

- More than 34 percent believed that preparing for a terrorist attack would *not* help them respond to one; only 45 percent believed it *would* help them.

- Only 25 percent *intended* to prepare within the next six months.[137]

Just as telling as the statistics, once again, are the trends they have illuminated. The first five items listed were repeats from the 2007 survey. Not one of these statistics improved by more than two percent from 2007 to 2009. In fact, one of them was a step backward: there were four percent more participants expecting to rely on emergency

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[137] Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey* (Washington, DC: Government Printing Office, 2009), 47–50.

responders following a disaster. The national goal set in 2007 was for 72 to 80 percent of Americans to meet some of these basic criteria.[138] Regardless of any goal, however, it is clear that the Culture of Preparedness is still just an *idea* in the United States.

Incredibly, a quick review of other data from 2003, 2007, and 2009 reveals similar trends: stagnation or negligible increases in preparedness for most areas, and decreases in preparedness for some areas. From 2003 to 2009, for example, there was a 7 percent increase in the number of respondents with emergency kits, but a 14 percent decrease in those with disaster plans. Specific questions and trends from the surveys are shown in Tables 1–5.

	2003	+/-	2007	+/-	2009
In your home	50%	3%	53%	4 %	57%
In your workplace	41%	4%	45%	0%	45%
In your car	34%	-4%	30%	4%	34%

* Do you have supplies set aside in … to be used only in the case of a disaster?

Table 1.   Disaster Supplies in Multiple Locations[139]

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[138] U.S. Department of Homeland Security, *Target Capabilities List*, 57–59.

[139] Federal Emergency Management Agency, *Personal Preparedness*, 7.

	2003	+/-	2007	+/-	2009
Supply of packaged food	45%	26%	71%	3%	74%
Supply of bottled water	54%	19%	73%	-2%	71%
Flashlight	41%	-1%	40%	2%	42%
First aid kit	64%	-30%	34%	5%	39%
Batteries	21%	4%	25%	2%	27%
Portable, battery-powered radio	14%	9%	23%	-3%	20%
Medications	---	---	9%	2%	11%
Cash	---	---	3%	-1%	2%
Financial documents	---	---	2%	-1%	1%
Photocopies of personal identification	---	---	1%	0%	1%
Eyeglasses	---	---	1%	0%	1%

*These responses were unaided and asked as part of a multiple response question. The results represent the total percent of respondents mentioning the existence of the particular item in their home as part of their disaster preparedness supplies. Respondents were asked "Could you tell me the disaster supplies you have in your home?"

Table 2.   Home Disaster Supplies[140]

	2003	+/-	2007	+/-	2009
Yes	58%	-16%	42%	2%	44%
No	42%	16%	58%	-3%	55%

* Respondents were asked "Does your household have an emergency plan that includes instructions for household members about where to go and what to do in the event of a disaster?"

Table 3.   Household Disaster Preparedness Plan[141]

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[140] Federal Emergency Management Agency, *Personal Preparedness*, 8.

[141] Ibid., 9.

	2003	+/-	2007	+/-	2009
Household members	68%	3%	71%	-1%	70%
Fire, police, and emergency personnel	62%	-5%	57%	4%	61%
People in my neighborhood	39%	9%	48%	1%	49%
Nonprofit organizations, such as The American Red Cross or the Salvation Army	---	---	40%	2%	42%
Faith-based community, such as congregation	---	---	39%	0%	39%
State and federal government agencies, including FEMA	34%	-4%	30%	6%	36%

*Each percentage represents top-box scores. Those stating 4 or 5 (top-box, most relied upon) are on a scale of 1 to 5, with 5 being "expect to rely on a great deal" and 1 being "do not expect to rely on at all" for assistance in the first 72 hours following a disaster. Respondents were asked, "In the first 72 hours following a disaster, please indicate how much you would expect to rely on the following for assistance."

Table 4.   Expectation of Reliance on Others[142]

	2003	+/-	2007	+/-	2009
Difficult to get information on what to do	14%	1%	15%	16%	31%
Lack of time	19%	-3%	16%	6%	22%
Haven't thought about it	---	---	15%	3%	18%
Don't think it is important	16%	-11%	5%	4%	9%
Don't think it will be effective	---	---	2%	2%	4%
Lack of money/too expensive	2%	0%	2%	0%	2%
Other	53%	0%	53%	-36%	17%

*These responses were unaided and asked as part of a multiple response question. The results represent the total percent of respondents mentioning the particular motivator from the list. Respondents were asked, "What is the main reason you have not received any preparedness training?"

Table 5.   Barriers to Preparedness Training[143]

2.   If That Doesn't Work, Try Harder

FEMA's research suggests, rather insists, that, for all of our efforts, Americans are *still* not moving. Amazingly, the percentage *doubled* of people who said they had not received any preparedness training because it was *difficult to get information* on what to do (Table 5)! Could this be a signal that the awareness campaigns have not had adequate reach? The seventh annual "National Preparedness Month" came and went in September 2010 and many of us probably never knew there was such a thing. There are plenty of

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[142] Federal Emergency Management Agency, *Personal Preparedness*, 22.

[143] Ibid., 21.

reasons to believe that "the marketing strategy" for individual participation has not been aggressive enough. In fact, this seems to be the conclusion of FEMA, whose eleven recommendations in the report essentially call for redoubling efforts to "reach" the American people. Key recommendations include

- *Communicating* more realistic expectations and responsibilities
- *More emphasis* on the importance of emergency kits
- *Greater appreciation* for the importance of emergency plans
- *Greater emphasis* on drills and exercises
- *Awareness* of vulnerabilities *that motivates* individuals to prepare
- Preparedness and response *education* should include a focus on hazard-specific actions
- *Emphasizing* social networks and the concepts of mutual support
- *Messaging and community outreach* efforts to support those considering taking action
- Linking training and volunteer service to *educating and encouraging* others
- *Tailoring outreach efforts* to targeted audiences
- *Greater collaboration* between citizens and law enforcement[144]

There is a discernable emphasis in each of these eleven summarized recommendations on communicating better in some way. The overall recommendation seems to be keep doing what we are doing, but find better ways to do it. This is not intended to be a criticism of the recommendations themselves. The conclusions and recommendations wrought in the report were clearly thought out and appropriate for the analysis of the data. Rather, the intention, here, is to highlight the tendency we have had to continue with the same approach, with minor tweaks, despite continually failing to achieve results. "Try harder" was the approach suggested by the White House's report on Katrina as well. Awareness campaigns will always be part of a solid strategy, but this thesis argues there is a more fundamental reason for lack of participation among Americans.

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[144] Federal Emergency Management Agency, *Personal Preparedness*, 47–53. Emphasis added.

2.   Answering the Wrong Question

The White House cited the successes of previous awareness campaigns as models for the preparedness effort. The major difference with "Stop, Drop, and Roll," however, was that it did not require citizens to *do* anything. Preparedness does. "Buckle Up America," on the other hand, *did* ask people to take action: to buckle their seatbelts when traveling in a vehicle—a seemingly small cost to individuals, but a difficult one for officials to overcome. While this particular campaign may have claimed some success, the government nevertheless decided, ultimately, to augment its safety "awareness" with legal enforcement and other influential slogans, like "Click It or Ticket." One could argue now that a "culture of seatbelts" has at last emerged, but it required additional mechanisms to what we are currently throwing at the citizen engagement problem. Americans were not failing to wear seatbelts because they were *unaware* of the danger, but because they *lacked the incentive* to fight the inertia of everyday habits and *change* their behavior.

A recent analysis of the awareness campaigns effectiveness indicated that "91 percent of Americans agree that taking simple steps to prepare for emergencies could help protect themselves and their families in the event of an emergency," but only 58 percent have taken any of those steps.[145] The director of the Ready campaign remarked, "That's the gap that we're ultimately dealing with." So now his office will look at "whether the message, which he said hasn't been altered since 2003, is still appropriate."[146] Instead of asking if we should change the message, we should be asking if a *message* is what is going to get the population to move. It has not so far. Instead of asking what is *wrong* with the message, we should be asking *why* the message is not

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[145] Federal Emergency Management Agency, "The Weather Channel Joins FEMA's Ready Campaign and Ad Council to Encourage Americans to Prepare for Emergencies," Federal Emergency Management Agency, http://www.ready.gov/america/about/pressreleases/release_100907.html (accessed November 25, 2010).

[146] Corey McKenna, "FEMA's Ready Campaign Refocused on Disaster Planning; Set for Reassessment," *Emergency Management* (2010), http://www.emergencymgmt.com/training/FEMA-Ready -Campaign-Disaster-Planning.html (accessed November 25, 2010).

working and consider that the answer might be because it is only a message. Perhaps awareness is the wrong vehicle for *nudging* citizens to take an action. Perhaps the problem needs deeper investigation.

3. Inadequate Study

One of the flaws with the current approach stems from not studying the problem adequately, particularly within academic circles. While there has been widespread use of "research agencies" (companies primarily specializing in obtaining and analyzing survey data), DHS has not visibly leveraged another great asset of this country—its academic institutions—to investigate solutions to the problem. This is likely due, at least in part, to the fact that no one seems to have agreed on what "homeland security" even is. One respected homeland security graduate-level professor and academic director recently developed seven distinct, well-stated definitions for homeland security, based on the sources of several legitimate literatures.[147] Some of the conflicting definitions even originated with the same federal homeland security agency. This is evidence, of course, that homeland security—whatever it is—is still being worked out, even after eight years. Regardless of which idea of homeland security one uses, however, most have recognized that individuals are an integral part of it. Nevertheless, the problem of how to engage them has not received much attention at the universities.

A 2006 survey, by the same professor, documented about four dozen ways in which academic institutions, agencies, and textbook publishers conceptualized "the" homeland security field of study.[148] When combined, these approaches identified over fifty different homeland security themes as *primary* topics.[149] This research supports the notion that, at the time, educators were far from reaching even general agreement as to what topics the *discipline* of homeland security should include as its core. The article did show agreement, however, that the topic of the "role of individuals in homeland security"

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[147] Christopher Bellavita, "Changing Homeland Security: What is Homeland Security?" *Homeland Security Affairs* IV, no. 2 (June 2008), http://www.hsaj.org/?fullarticle=4.2.1 (accessed October 13, 2010).

[148] Christopher Bellavita and Ellen M. Gordon, "Changing Homeland Security: Teaching the Core," *Homeland Security Affairs* II, no. 1 (April 2006), 1, http://www.hsaj.org/pages/volume2/issue1/pdfs/2.1.1.pdf (accessed August 12, 2010).

[149] Ibid., 1–2.

was hardly being considered a candidate. This particular theme was found just once among the core topics of the four dozen sources reviewed.[150] Subsequent research in 2008 reflected a similar level of importance being placed on the topic across thirty-five undergraduate homeland security programs.[151] In addition, of the 68 homeland security professionals who responded to a survey from the same study, only 56 percent identified the topic area as important.[152] While it can still be argued that homeland security, as a professional field of study, remains in a developmental stage, the most recent strategic guidance from DHS, by its very nature, had the effect of instantly creating a gap within the discipline.[153] The theme is now due for more focused attention among academia—if for no other reason than validation of the department's claim as to the importance of individuals within the homeland security enterprise. It is the intention of this thesis to help narrow the existing gap.

D.   CONCLUSIONS

Officials have acknowledged that a change in culture is a long-term endeavor. However, it has been over nine years since 9/11, over seven years since the launch of FEMA's preparedness programs, over five years since Hurricane Katrina, and the numbers are still "very concerning and frankly kind of frightening."[154] To quote the Katrina report, "more needs to be done"—but *not* more of the same.[155] Awareness will

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[150] Bellavita and Gordon, "Teaching the Core," 16. See note 2 of the source. The 51 topics were listed in order of frequency (Ibid., 1–2). Topics in the second half of the list were mentioned one to three times. The "role of individuals" was ranked dead last, indicating a single occurrence of the topic among four dozen sources.

[151] Scott Winegar, "Developing the Bench: Building an Effective Homeland Security Undergraduate Program" (master's thesis, Naval Postgraduate School, 2008), 74. In this case, just three of the institutions maintained a course in which the "role of the individual" was a major theme.

[152] Ibid., 28–29. Subjects were asked to prioritize 30 homeland security topics as "very important," "important," "slightly important," "neutral," "slightly unimportant," "unimportant," or "very unimportant." The 56 percent refers to the respondents who rated "role of individuals" as either "very important" or "important." Just 22 percent considered the topic "very important."

[153] Principally, the guidance that said "the highest calling" was "to empower Americans to contribute" U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 69.

[154] Timothy Manning, "Disasters and Resilience: Perspectives from FEMA Deputy Administrator Timothy Manning" (speech to the Center for National Policy, Washington, DC, April 23, 2010), http://www.centerfornationalpolicy.org/ht/a/GetDocumentAction/i/18109 (accessed November 25, 2010).

[155] White House, *Hurricane Katrina*, 80.

always be important, along with education, training, and volunteer service, but they are clearly not enough to move Americans to *do* something. Six years of trying with little to show for it has demonstrated that something is missing from the approach. "Trying harder" to *fix* the problem by repeatedly using the same approach is wasteful and irresponsible. Rather, we need to be trying harder to *analyze* the problem, to determine what it is that is keeping Americans latent. The surveys are actually a great tool, but we seem to be missing the point. When 91 percent of Americans say they *know* individual preparedness is important, but only 58 percent have done anything about it, it should tell us that awareness is *not* the problem.

Education is important to help Americans realize their lives and livelihoods really *are* at risk, but making individual Americans really *believe* that they could be affected personally or that the professionals may not save them is too high a mountain. The past nine years have demonstrated that. Even with the terror of 9/11, the casualties of war, and the devastation of Hurricane Katrina, people have taken the new "age" of homeland security in stride, perhaps complained at times, but have, for the most part, gone on about their daily routines, not even considering the real possibility that they could be touched. Any progress we *might* have in making believers will take too long to make it worth waiting. In fact, some would argue we have already waited too long. If Americans are deemed by officials to be so important to homeland security, then there are too many things riding on this—namely American lives.

No matter which expert or survey you turn to, the conclusions seem to remain the same: (1) the United States is *still* failing to leverage a critical asset and (2) American citizens have *still* not embraced their important role in homeland security. We can continue with the same basic approach, waiting patiently for a "culture" to set in, or we can adopt a more proactive approach that demands quicker results. By continuing to wait, we risk much. A new framework for addressing the problem is needed, along with more focus on the problem's source. Chapter IV offers such a framework.

IV.   WHY PEOPLE CHOOSE NOT TO PARTICIPATE

> The American people hold a strong sense of community, a belief in collective responsibility, and a willingness to do what is required of them to contribute to our common security and sustain our way of life.[156]

Despite consensus among homeland security leaders that the American people are falling far short of fulfilling their homeland security responsibilities, very few are *asking* why. Most are throwing what seem to be reasonable solutions toward the *symptoms* of the problem without considering the *root cause* with due diligence. When surveys report that Americans do not know what to do to prepare, or do not believe they need to prepare, we quickly assume the fix is to *tell* them what they need to know or believe, to *convince* them that this stuff is important. It might happen that increasing awareness will foster the desired "preparedness" mindset, that communicating more openly will encourage mutual trust, and that creating more opportunities will increase participation across the board. These things *might* happen, but so far, they have not. To assume that Americans live in a vacuum—that they will only understand what we spoon-feed them—is naive. Americans may be self-absorbed, but they are not helpless or stupid. Americans are aware of disasters, of terrorist attacks, and of people who were not expecting terrible things to happen to them. Americans also know how to *get* information if they want it. Most have a *world* of information just one click away—at work, at home, in their pockets! After almost a decade of trying to convince Americans that they are needed in homeland security, perhaps it is time to consider that lack of *awareness* is not the source of the problem. Rather than attacking symptoms, we must fully contemplate the cause, and then act *decisively*, not encouragingly, to remedy the shortfall. If individuals Americans truly are important to homeland security—and we have seen that they are—then too much is at stake to continue the current course.

Perhaps Homeland Security officials should pursue more aggressive information campaigns, but American citizens who have yet to take a proactive approach to homeland security are not *unaware* that they can contribute to a more secure, better-prepared

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[156] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 69.

society. This chapter argues that individuals *choose* not to take particular actions—not to learn more about homeland security through countless credible websites, not to put together emergency kits and formulate emergency plans, not to volunteer within their communities. Quite simply, most people do not participate in homeland security because they *decide* not to do so. Furthermore, these decisions are perfectly logical, even while acknowledging the importance of homeland security. When individuals contemplate whether to contribute, their considerations will not typically include their distrust of the government, the small number of opportunities from which to choose, or a lack of patriotic feeling. Individuals choose not to participate in ways they know they could because they perceive these decisions to be in their best interest and, in that regard, the most rational choices they could make.

This chapter argues that the problem of citizen nonparticipation is a *collective action* problem in which Americans are immobilized by their incentive to remain *free riders* in the production of a *public good*: homeland security. The chapter will explain the relevant concepts of the theory, their application to our problem, and mechanisms that would enable us to overcome the free-rider impasse. The chapter will then use the developed framework to analyze a case in which citizens *have* embraced their role in homeland security: the state of Israel, and attempt to extract lessons applicable to the United States.

A.   THE LOGIC BEHIND NONPARTICIPATION

The most appropriate starting point for any examination of collective action theory is with Mancur Olson's seminal work, *The Logic of Collective Action*. Published in 1965, Olson contended with the prevailing view that a group of individuals, defined by common interests, would logically act on behalf of the *group's* interests.[157]   The traditional view proceeds from the same notion that a rational individual will act on behalf of his or her *individual* interests. Ironically, Olson was able to argue that this theory of group behavior was incorrect *because* all groups are composed of rational, self-interested individuals.

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[157] Olson, *Logic of Collective Action*, 1.

1.   Defining the Group

First, let us consider what is meant by "a group." In the context of collective action, Olson reasoned that the *primary* purpose for forming organizations was to advance common interests of groups of individuals.[158] Even unorganized groups, for the purpose of studying collective action, are characterized by at least one common interest. In fact, since unorganized groups do not have explicit memberships like organizations, the *only* defining quality of a group, in our case, is common interest. In our problem, we will consider the common interest to be "homeland security"—whichever definition you prefer. Therefore, any American resident who derives utility from keeping the homeland secure is in our group of interest. Remember, utility is to individuals what profit is to businesses: it is a "measure of benefits" that rational individuals are constantly trying to maximize.[159] One economist offered this great illustration of the concept:

> I derive utility from getting a typhoid immunization and paying taxes. Neither of these things makes me particularly happy, but they do keep me from dying of typhoid or going to jail. That, in the long run, makes me better off.[160]

Recent research used to derive the 2010 Unisys Security Index for the United States reported that 89 percent of Americans are at least "somewhat concerned … about national security in relation to war or terrorism."[161] A Red Cross survey indicated that 89 percent of Americans think it is important to prepare for disasters.[162] Based on these data, we can assume that approximately 90 percent of Americans believe homeland security will make them better off. This is "the group" we wish to examine here: the very large group of individual Americans who believe that homeland security benefits them as individuals.

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[158] Olson, *Logic of Collective Action*, 7.

[159] Downs, *Economic Theory of Democracy*, 36.

[160] Wheelan, *Naked Economics*, 6.

[161] Lieberman Research Group, *UNISYS Security Index: United States 31 March 2010 (Wave 1H'10)* (New York: Unisys, 2010), http://www.securityinfowatch.com/files/whitepapers/Unisys_Security_Index_1H2010.pdf (accessed December 6, 2010).

[162] McKenna, "FEMA's Ready Campaign."

2.   The Nature of Public Goods

Another important concept to this study is that of public goods. Public goods are said to hold two properties: (1) "jointness of supply" and (2) "impossibility of exclusion."[163]   A good is in joint supply when consumption by one person "does not reduce the amount available to anyone else."[164] It is actually difficult to think of goods that strictly meet this criterion. National defense is often cited as an example, but even here, as more and more people "consume" defense, the "level" of defense realizable will diminish, such as if the population of state continues to grow, but the resources allocated to national defense do not.[165] Practically speaking, ocean water is a physical good that might fit this description. Some products of homeland security could be considered joint supplies; others could not. For example, whether a foiled biological attack spared one civilian or one million would not reduce the amount of the "joint" good (prevention of biological attack, in this case) available. On the other hand, if one citizen requires emergency responders to tend to him following a disaster, it will reduce the emergency response capability remaining for his neighbor. Emergency response, therefore, would not be a good example of a joint supply. The concept requires defining precisely the good being considered.

The second property of a public good is that, if it is available to one person, it is impossible to prevent anyone else in the group from consuming it.[166] In other words, even if others in the group do not pay for the good, they cannot be excluded from sharing in its benefits. Common examples of goods exhibiting this characteristic are police services, public parks, broadcast television, interstate highways, or national defense. Once provided, it is impossible, or nearly so, to keep non-payers from consuming these types of goods. Homeland security can be broadly considered to meet this criterion. Using our previous examples, it would be impossible to withhold the benefits of a

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[163] Russell Hardin, *Collective Action* (Baltimore, MD: Published for Resources for the Future by the Johns Hopkins University Press, 1982), 17.

[164] Ibid.

[165] James M. Buchanan, *The Demand and Supply of Public Goods* (Chicago, IL: Rand McNally & Company, 1968), 49.

[166] Hardin, *Collective Action*, 17–18.

prevented biological attack from any person in the affected area, whether they paid taxes or not. On the other hand, it might be *possible* to withhold life-saving emergency services from a "non-payer," but our society would not allow that. Such a system would be *infeasible*. Olson permits this looser interpretation of "impossibility of exclusion" in his argument.[167] In fact, in considering collective action problems, this is the only property of public goods with which we are concerned: the infeasibility of excluding any person in the group from consuming the available good (14–15). Again, in this case, the available good is homeland security.

Tying our concepts of groups and public goods together, Olson claimed that "the achievement of any common goal or the satisfaction of any common interest means that a public or collective good has been provided for that group" (15). Here it is important to note that it does not matter whether everyone in the group is aware of everyone else in the group. For example, consider a member of the community who has a strong interest in (or would derive utility from) building effective local emergency response capability. He is part of a large *group* of people in the community who share this common interest. If other members of the group work to realize this goal, say through CERT training or other volunteer opportunities, the first member will reap the perceived benefits of the group effort whether anyone else ever knew he was part of the group in the first place.

3.   The Irony of Self-Interest in Predicting Large Group Behavior

If the members of a group would be better off when that group achieved its objectives, then it would seem a reasonable assumption that a rational, self-interested individual belonging to the group would act in accordance with group interests. Olson makes the case that this assumption does not follow logically. To the contrary, he asserts that

> …though all of the members of the group have a common interest in obtaining [a] collective benefit, they have no common interest in paying the cost of providing that collective good. Each would prefer that the others pay the entire cost, and ordinarily would get any benefit whether he had borne part of the cost or not. (21)

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[167] Olson, *Logic of Collective Action*, 14.

Therefore, Olson argues, "rational, self-interested individuals will not act to achieve their common or group interests" unless the group is very small or unless coercion or some other mechanism is in place to influence individuals to do so (2).[168] More strikingly, he argues that this assertion holds true even when the group unanimously agrees on the "common good" and the ways to achieve it (1–2). In terms of group characteristics, size is the greatest determinant of whether a group is likely to achieve its collective purpose.

4.   Why Group Size Matters

The reason group size is so important in predicting group success is that an individual's decision to act in the interest of the group depends on whether that individual's actions are perceptible to other members of the group. The larger the group, the less perceptible individual actions are (45). In order to facilitate analysis of the collective action problem, Olson classifies three types of groups:

- Small "Privileged" Groups. At least one member has the incentive to ensure the collective interest is achieved, even if that member has to bear the entire cost of providing it.

- "Intermediate" Groups. No member receives a large enough share of the group benefit to give them an incentive to bear the entire cost themselves, but the group is not large enough to ensure no member will notice whether any other member is contributing. Olson says this type of group may or may not obtain their collective good, but definitely will *not* obtain it without some level of group organization and coordination.

- Very Large "Latent" Groups. If one member does not act on behalf of the group interest, no other member will be noticeably affected or have a reason to react. (49–50)

From Olson's taxonomy, it is clear that the larger the group, the greater the difficulty the group will likely have in obtaining its collective good. The very large group, therefore, Olson refers to as "latent" because it has the potential to act, but will only do so with an external mechanism to motivate its individual members to act in the

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[168] Olson, *Logic of Collective Action*, Emphasis added.

group's interests (51). Our group, which is a *very* large group with a common interest in providing homeland security, would be considered a "latent" group by Olson's description.

5.   Separate and "Selective" Incentives

"By definition," Olson argues, "an individual in a 'latent' group … cannot make a noticeable contribution to any group effort, and since no one in the group will react if he makes not contribution, he has no incentive to contribute" (50). Therefore, he reasons, "Only a *separate and 'selective' incentive* will stimulate a rational individual in a latent group to act in a group-oriented way" (51). An incentive must be *separate* in that it is different from the collective good that the group is trying to obtain. Furthermore, it must be *selective* in that it is not indiscriminately offered to anyone in the group, like the collective good itself, but rather is limited to the individuals who contribute to the attainment of that collective good. Selective incentives can be either positive or negative in nature—by rewarding those who contribute to the group's goals, or by punishing those who do not (51).

Selective incentives need not be economic in nature. Olson acknowledges that we must consider non-financial incentives as well, such as "prestige, respect, friendship, and other social and psychological objectives" (60). Social incentives work because they are separate from the collective good itself and they are selective by nature. They serve to highlight individuals among the group by either rewarding individuals for significant contributions (e.g., prestige) or just "getting involved" (as with friendship)—or punishing individuals by ostracizing them when they do not act in the interest of the group (61). However, Olson makes the strong argument that "social pressure and social incentives" are really only effective in smaller groups, where "face-to-face contact" is much more likely (62). This is certainly not a characteristic of our group of American "citizens-at-large," at least not to the extent that there are prevalent social incentives for taking individual actions purely in the interest of homeland security.

However, Olson does offer a way for large groups to use incentives that are particularly effective with smaller groups—by federating the large group. In other words,

when a very large group is divided into many smaller groups, all seeking to achieve the greater interests of the large group, the large latent group is able to use social incentives to stimulate group-oriented action. In fact, Olson says this is the only practical way for large groups to use social incentives effectively (63).

6.   Altruism Will Not Mobilize a Latent Group

One common criticism of Olson's theory—and of many economics-based explanations for human behavior in general—is that the model of "self-interested" individuals leaves no room for selfless good deeds. This is not true. *Self*-interest is not the same as *selfish* interest. The argument here is that individuals will seek to maximize their own utility, not their selfish gains. Many people will decide to act out of selflessness because it pleases them to do so. They gain something from self-sacrifice that is greater than the cost required. If that were not so, they would not do it.

One author gave us this example of remarkable selflessness:

> In 1999, the *New York Times* published the obituary of Oseola McCarty, a woman who died at the age of ninety-one after spending her life working as a laundress in Hattiesburg, Mississippi. She had lived alone in a small, sparsely furnished house with a black-and-white television that received only one channel. What made Ms. McCarty exceptional is that she was by no means poor. In fact, four years before her death she gave away $150,000 to the University of Southern Mississippi—a school that she had never attended—to endow a scholarship for poor students.[169]

Ms. McCarty was a selfless individual who gained greater utility from saving up her money and giving it away, than from living in a nicer home with better furnishings. The economic model of the rational, self-seeking individual has room for the selfless individual. However, even this person will not be motivated to contribute to the interests of very large group.

Consider that Ms. McCarty had countless scholarship funds to which she could have donated her life savings, and probably with greater ease than establishing a new scholarship. Furthermore, she probably could have targeted the same group of students

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[169] Wheelan, *Naked Economics*, 7–8.

as she did with her new fund. The likely reason that she did not, however, is that she wanted to use her money in such a way that a difference might be perceived by her taking that action. This is not to say that she even had in mind the recognition she might receive for such a solitary gift, but rather she would not want to "give all she had" to a large existing foundation that would "dilute" the gift's *effects* in others' lives. She apparently had in mind to have a greater effect on perhaps fewer students. Olson says it best:

> Even if the member of a large group were to neglect his own interests entirely, he still would not rationally contribute toward the provision of any collective or public good, since his own contribution would not be perceptible.
>
> Selfless behavior that has no perceptible effect is sometimes not even considered praiseworthy. A man who tried to hold back a flood with a pail would probably be considered more of a crank than a saint, even by those he was trying to help.[170]

Not even selfless sacrifice is likely to effectively mobilize a "latent" group toward attainment of its collective objectives. Consider the effect an all-volunteer military service might have had on the outcome of World War II. For that matter, if the U.S. Armed Forces today had to rely exclusively on its members' willingness to sacrifice themselves for the defense of their country—one of the noblest of causes by many accounts—our military capability would not be nearly what it is today.

7.   Patriotism and "Sense of Community" Are Not Enough

Many critics would argue that "emotional and ideological elements" are often enough to propel large organizations toward achievement of their common goals.[171] In essence, that is what the Department of Homeland Security is arguing in this chapter's opening quote. Perhaps the greatest example refuting the argument is in one of the most important organizations there is: the state. If any large group has an emotional or ideological motivation to contribute to a common good, it is the citizens of a nation-state, such as the United States. Yet, as Olson puts it,

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[170] Olson, *Logic of Collective Action*, 64.

[171] Ibid., 12.

despite the force of patriotism, the appeal of the national ideology, the bond of a common culture, and the indispensability of the system of law and order, no major state in modern history has been able to support itself through voluntary dues or contributions.[172]

Rather, states have always had to rely on the coercive mechanism of taxes. The reason for this is that the provisions of the state are, by nature, public goods, much like homeland security. No one citizen in good standing can be feasibly excluded from the benefits of a state's most basic services, be it the armed forces, police services, the court system, etc. Even the state, "with all of the emotional resources at its command, cannot finance its most basic and vital activities without resort to compulsion."[173] The homeland security enterprise, likewise, should not expect to rely on "a strong sense of community, a belief in collective responsibility, and a willingness to do what is required" to obtain the necessary participation from its citizens—not without additional mechanisms or institutions in place.

8. What This Means to U.S. Homeland Security

When considering the challenge of garnering greater individual participation in homeland security, Olson's collective action model offers a powerful framework. To use it effectively, we must understand why it is applicable, whom it applies to, and how it applies.

a. The Applicability of the Model

We have attempted to keep our homeland security problem in mind, while discussing the theory. First, Olson's model applies because we assume there is group of individuals who have a *common interest* in sharing the benefits of homeland security. Second, Olson's collective action theory applies to our problem because we are able to treat homeland security as a public good. Specifically, by providing homeland security and all that it includes, we are not able to feasibly exclude anyone who might benefit from it, regardless of whether they contribute to its provision. We cannot prevent a large-

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[172] Olson, *Logic of Collective Action*, 13.

[173] Ibid., 13–14.

scale terrorist attack on one contributing citizen without providing the same benefit for all of her non-contributing neighbors. Likewise, we said it would be infeasible in our society, according to our values, to withhold life-saving emergency response services from a disaster victim simply because he decided not to prepare an emergency kit or evacuate as ordered. The victim who put his own life in danger by neglecting to prepare will receive the same services that his ultra prepared neighbor would if she needed assistance. Finally, Olson's model is particularly applicable to our problem because, as we have seen, optimum homeland security can only be achieved when the group (individual Americans) contributes to its production.

b. *To Whom the Model Applies*

According to Olson's treatment of groups, our group in this problem includes *any individual* who has a common interest in homeland security. Furthermore, we can safely assume that this group includes a huge majority of Americans, if not all. It is, indeed, a *very* large group. In reality, however, homeland security is comprised of a great number of independent and interdependent interests. Broadly, these interests include prevention of terrorism, border security, immigration control, cybersecurity, resilience from attacks and natural disasters, and strengthening homeland security overall. Not everyone has the same level of interest in each aspect of homeland security. Additionally, not everyone perceives every aspect of homeland security to be a public good. These factors result in varying types and levels of contributions from among the group.

For example, given the group just defined, survey data might suggest that either Olson's theory does not apply, or it is incorrect. After all, there are quite a large number of Americans doing *something* to contribute to preparedness or some other aspect of homeland security in their individual capacities. Olson's theory says they will not do this without separate and selective incentives, and social incentives, in particular, are unlikely to work in a very large group. If 57 percent of Americans are contributing to homeland security by setting aside supplies in their homes to be used only in the case of a

disaster, how can Olson's theory correctly fit?[174] After all, we also saw that 61 percent of Americans expect to rely largely on fire, police, and emergency personnel in the first 72 hours following a disaster.[175] At the very least, 18 percent of those surveyed belonged to both groups.[176] Why would *any* of these people bear the cost of contributing by better preparing themselves if they expected to rely on emergency response services? How can Olson's theory apply to this case? The reason for the apparent contradiction here is due to differing perceptions among individuals as to the nature, benefits, and costs of the good—in this case preparedness.

For those individuals who *do* prepare for disasters and attacks, and prepare completely (surveys show this to be a small group), preparedness is perceived as a *non*collective (private versus public) good whose benefits outweigh its costs. By this, we mean that these individuals perceive they are bearing the cost to obtain a good that the group will not provide for them. In particular, they perceive personal preparedness to be a source of *protection* from disaster or emergency that is unobtainable from the group.

Other individuals will partially prepare to the extent that they perceive they are obtaining a noncollective benefit. For example, a person might stock a flashlight and a battery-powered radio because they are able to use them for other purposes, such as routine power outages, or even camping. They would not expect the group interested in homeland security to provide these types of benefits so they are willing to bear the cost for them.

Additionally, some individuals might partially prepare because they do not perceive a net cost in doing so. Many of those surveyed may respond that they have stocked food and water for use in emergencies because these are items they would purchase anyway. Buying some of these supplies in bulk may further reduce per unit costs of these items both financially as well as in terms of the time and energy that is

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[174] Federal Emergency Management Agency, *Personal Preparedness*, 7. See Table 1 of this thesis.

[175] Ibid., 22. See Table 4 of this thesis.

[176] This is a mathematical certainty. Even if these two groups of people were diametrically opposed, they would overlap by 18 percent. It is likely that more than 18 percent fit both descriptions.

spent making trips to the store. Many of the reported emergency food and water kits may exist by virtue of the fact that many individuals routinely buy wholesale foods.

To the extent that an individual in our group perceives a particular contribution to homeland security to provide him or her a noncollective good, unobtainable from the group itself, he or she may decide to bear the cost of that contribution. An individual will do this when the perceived benefits of the noncollective good outweigh perceived costs of obtaining it—in other words, when the individual derives utility from taking the action. However, when the good is perceived to be a collective good, one that will likely be provided by the group, the individual will be unwilling to bear any cost in providing it without a separate and selective incentive. *Olson's model applies to all individuals who have a common interest in homeland security, but an individual's perception of the nature, benefits, and costs of a particular homeland security good will have everything to do with whether he or she will contribute to its provision.*

c. *How the Model Applies*

Most individuals would perceive gaining some amount of utility—even if minuscule—by having a household prepared for disasters, yet many do not prepare. Why? They perceive the costs (in money, time, and effort) of preparing to be greater than the benefits of being prepared. We can get a better idea of the specific costs perceived by individuals when we analyze respondents' answers to a particular question in the most recent Citizen Corps survey. This question was posed to individuals who had done nothing to prepare or were not intending to prepare for disasters. The question asked these individuals to identify the listed potential barriers to preparedness as either a "primary reason, somewhat of a reason, or not a reason at all" for them not taking any preparedness steps.[177] Table 6 shows the results.

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[177] Federal Emergency Management Agency, *Personal Preparedness*, 19–20.

	Primary Reason			Not A Reason At All		
	2007	+/-	2009	2007	+/-	2009
I think that emergency responders, such as fire, police or emergency personnel will help me	37%	- 8%%	29%	28%	5%	33%
I just have not had the time	24%	2% %	26%	48%	-2%	46%
I do not know what I am supposed to do	27%	-3%	24%	43%	0%	43%
It costs too much	17%	1%	18%	63%	-5%	58%
I do not think that it will make a difference	17%	-1%	16%	57%	2%	59%
I do not want to think about it	19%	-2%	17%	56%	1%	57%
I do not think I would be able to	13%	0%	13%	70%	-2%	68%

*Respondents were asked to identify potential reasons for not preparing as a "primary reason, somewhat of a reason, or not a reason at all."

Table 6.   Primary Reasons Cited as Barriers to Preparedness[178]

Based on the results from 2009, we can determine that individual Americans find the following factors to be at least "somewhat of a reason" for not preparing.[179] Beyond that, we can restate these reasons to show how individuals weigh the decision of whether to prepare from a cost-benefit perspective:

- Emergency responders will help me (67 percent)
  - Restated: I will get help from the group whether I contribute or not (emergency response as a public good; Olson's classic case: *any* perceived cost of preparing would likely keep these people from contributing in this way)
- Have not had time (54 percent)
  - Restated: The costs in time it would take to prepare, plus any other perceived costs, have thus far outweighed the perceived benefits of preparing.
- Do not know what to do (57 percent)

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[178] From Federal Emergency Management Agency, *Personal Preparedness*, 20.

[179] This is found by subtracting the percentage of respondents identified under "Not A Reason At All" from 100 percent. We assume, here, that all respondents who did not mark "not a reason" annotated either "somewhat of a reason" or "primary reason."

- Restated: The costs (efforts) of finding out how to prepare, plus any other perceived costs, outweigh the perceived benefits of preparing.

- Costs too much (42 percent)

  - Restated: The financial costs of preparing, plus any other perceived costs, outweigh the perceived benefits of preparing.

- Do not think it will make a difference (41 percent)

  - Restated: The perceived utility gained by preparing is outweighed by *any* perceived costs of preparing.

- Do not want to think about it (43 percent)

  - Restated: The cost of thinking about preparing (time, effort, emotional stress), plus any other perceived costs, outweigh the perceived benefits of preparing.

- Do not think I would be able to (32 percent)

  - Restated: The perceived utility of preparing might be worth the perceived costs, but the costs are perceived to be insurmountable for the individual, thereby making adequate preparation impossible for them to achieve without someone else's help, if able to achieve it at all. Examples might be a disabled or elderly person who does not believe they could ever bear the costs of preparing, or someone who believes *adequate* preparation for the worst disaster would be unaffordable.

Analysis of these data is made easier when we consider that personal preparedness is a means of protecting an individual and his or her family from the harmful effects of terrorist attacks, natural disasters, or other emergencies. The good being considered, in this case, then, is *protection from all hazards*. It is clear from the responses above, that two-thirds of those who have chosen not to take personal preparedness steps believe, at least on some level, that emergency response personnel will protect them from all hazards. *These individuals perceive protection from all hazards to be a collective good.* Furthermore, this perception is one thing that keeps them from contributing to the nation's overall protection, or resilience, by preparing themselves. These individuals are our classic free riders described by Olson's theory of collective action. They have a common interest in being protected and, by default, an interest in being resilient, but believe that the group will provide them that protection whether they contribute or not. These people form a very large group that includes not

only those who have not taken any preparedness steps, but also those who have only taken steps that provide them a noncollective benefit or that do not require them to bear any perceived costs. Olson's model is particularly useful for this group of individuals: it tells us that we should not hope for group-oriented behavior from them until (1) their perception is changed or (2) they are given separate and selective incentives to contribute. Changing perceptions or beliefs can be a long, difficult process, as we have seen with preparedness awareness campaigns. With many individuals, a change might never be realized. Incentives, on the other hand, are effective in spite of personal beliefs. They deal exclusively with the existing cost-benefit relationship and therefore are able to achieve results almost immediately.

The rest of the responses indicate people who might perceive that they could provide themselves some protection from hazards, but for whom the costs of providing that protection outweigh the perceived benefits. Although they do not necessarily believe that the group will provide their protection, they would require a reduction in perceived cost, an increase in perceived benefit, or both to get them to take personal preparedness actions. These people can be mobilized using the same types of mechanisms prescribed by Olson for dealing with large latent groups—namely positive or negative incentives. Positive incentives increase the perceived benefit of taking action. Negative incentives increase the perceived costs of *not* taking action. Even for those who do not believe preparedness has any utility (because it will not make a difference) can derive utility by taking action when a separate incentive is tied to that action.

Ultimately, no individual will mobilize until he or she perceives the individual costs of contributing to be less than the personal benefits of the particular contribution. We can use incentives to shift that balance. When the individual is a member of the large latent group that perceives protection from all hazards to be a collective good, the incentive must be *separate* from the good itself—that is, it must provide the individual something other than protection, in the example. Additionally, the incentive must be *selective* in that it is only available to those who contribute (by preparing for disaster, in this case) when it is a positive incentive, or to those who do not contribute when it is a negative incentive.

B.   THREE GENERAL SOLUTIONS FOR HOMELAND SECURITY

We have focused a great deal on personal preparedness, largely because it is the major emphasis of homeland security officials, but also because it is an area for which we have a great deal of data. Olson's theory of collective action, however, can be applied and useful for any scenario in which (1) there is a collective homeland security good that needs to be provided by individuals; (2) there is a group of individuals with a common interest in providing that good; and (3) the good, once provided, cannot be feasibly withheld from anyone in the group. When the group is very large, individuals will only be mobilized to act in the interest of the group if there is a separate and selective incentive to do so. For these cases, in accordance with the principles of collective action as rendered by Olson, there are three distinct possibilities for gaining the participation of those Americans who have not yet decided to act. These mechanisms will also be effective for those individuals who perceive that the good will *not* be provided by the group (a noncollective good), but still do not provide it because they perceive the costs to be greater than the benefits.

1.   Incentives

Of the three general solutions offered here, incentives are perhaps the most practical and politically acceptable alternative for engaging "latent" citizens in homeland security. Incentives are flexible, can be targeted to achieve specific behaviors from specific groups of individuals, and keep the desired individual behavior on a voluntary basis.

Incentives are flexible in a number of ways. First, they can be offered by any homeland security entity at any level. The federal government can offer direct incentives in the form of income tax breaks. States can offer incentives in the form of income or sales tax breaks. Counties can offer lower property taxes. Communities can offer incentives by reducing municipal fees, such as for downtown parking. The private sector can offer free products or rebates on purchases. Incentives are an available tool for just about any organization trying to achieve a particular behavior.

Second, incentives are flexible because they can be virtually unrelated to the action being incentivized. In fact, Olson's theory requires that they are unrelated to the extent that the incentive provides a benefit "separate" from that of the action itself. For example, Radio Shack could offer a free battery-powered radio with purchases over $100.[180] The Department of Motor Vehicles (DMV) could offer a reduced licensing fee for proving that you have an emergency kit matched to that particular vehicle. Conversely, the DMV could raise vehicle licensing fees for all vehicles that do *not* have a matched emergency kit. This is the third way in which incentives are flexible. They can be applied positively to add a benefit to the desired action or negatively to raise the cost of not taking the desired action. When applied negatively, they give the incentive providers an opportunity to increase revenue while encouraging the desired behavior, such as higher fuel taxes that encourage people to reduce consumption, or the aforementioned higher licensing fees.

Incentives are also flexible because they can be directed at particular groups. Lower income families can be targeted using financial incentives, for example. Owners of homes of particular types or in particular locations can be targeted with property tax or insurance incentives. Automobile owners can be targeted with insurance or registration fee incentives. There are countless ways to apply incentives through various combinations of provider, type of incentive, targeted behavior, targeted individuals, and nature of incentive (positive or negative). The ways to employ incentives are almost entirely limited by one's imagination.

There is, however, another limit to the use of incentives. The behavior being incentivized must be verifiable. This can make incentivizing certain behaviors quite challenging. For example, it might be difficult to incentivize *having* a fully stocked home emergency kit because it would be difficult or impractical to verify. One could, however, incentivize *buying* pre-built kits, but this might not be as effective as reducing homeowners' insurance rates for *having* a kit, for example.

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[180] Radio Shack might do this because they are receiving an incentive from the federal government for providing household emergency supplies.

Finally, what makes incentives the most politically acceptable alternative of the three general solutions given is that it still relies on *voluntary* behavior to achieve the desired outcome. Americans may grumble about higher taxes or increased fees, but these negative incentives will not have the political backlash of a new law that fined people for not having an emergency kit in their car when pulled over for some other reason.

A disadvantage of incentives is that, in order to reward individuals for contributing to homeland security, it may exact a cost from the offering entity. Additionally, some incentives may require advertising to make people aware of their existence. Many of these advertisements, however, might be able to be combined with existing awareness campaign messages.

2.   Coercion

Coercion is perhaps the least politically acceptable solution to gaining the participation of citizens. It might loosely be considered a negative incentive, but coercion is such that it makes compliance seem mandatory to individuals. When actions are required by law, are able to be enforced, and are punishable by fines or imprisonment, for example, coercion is being used. Seatbelt laws are a coercive instrument. Higher fuel taxes are not.

Coercion is effective to the extent that the behavior can be enforced. For example, many states have enacted laws prohibiting handheld cell phone use while driving; however, you may have noticed a large number of people still using them. This is because the law is difficult to enforce. On the other hand, driving without a current vehicle registration is much less common.

Coercion also requires that punishments for noncompliance are great enough to make the cost of not taking the action greater than the net cost taking the action. Often the stigma of violating the law can be a powerful motivator to comply. However, this is not always the case. Many people get multiple speeding tickets because the risk (cost and likelihood of bearing the cost) of speeding is perceived to be worth the benefits. "Multiple-offense" penalties are designed to tip the cost-benefit balance for individuals who fit this category.

Coercion is not likely to be as effective as incentives when one of the goals is to get individuals to "embrace" the behavior that is trying to be achieved, such as in the "culture of preparedness." Coercion has a tendency to place the individual's focus on avoiding the punishment rather than on the underlying reason for the new behavior. Resentment is a more likely outcome than constructive new beliefs about the importance of homeland security

Despite some of its disadvantages, however, coercion will be the most appropriate mechanism for achieving a desired behavior when widespread compliance is vitally important. For example, in the unlikely case that the federal government determined in-car emergency kits were vitally important to national resilience, they would most likely achieve greater participation through legal enforcement than by offering incentives. In the case of national security, coercion might be worth its political consequences.

3.   "Federation"

The final way to mobilize a large latent group of citizens with a common interest in homeland security is simply to organize it into smaller groups. The goal in doing so is to attain groups small enough that (1) individuals not contributing will be noticed by other individuals, and ultimately, (2) at least one individual will find the benefit of taking the desired action to be worth bearing the entire cost himself. If the first trait is achieved, Olson calls this an "intermediate" group that may or may not achieve the group's interest, but will only achieve it through organization and coordination within the group. If the second trait is also achieved, Olson calls this a "privileged" group because this size of group will achieve its group objective, even if not at an optimal level.

For groups this small to emerge unaided from the very large group with a common interest in homeland security is highly unlikely. These types of groups are one promising feature of the Citizen Corps' local councils. However, even at a community level, the group interested in homeland security is still too large to be considered an intermediate group because the inaction of one person is not discernable to the rest of the group. For a group to be small enough to become an "intermediate" or "privileged" group would require something more like neighborhood-sized groups of a handful of

residents or families—groups akin to neighborhood watch groups. Neighborhood watch groups are formed on a voluntary basis, however. To achieve measureable homeland security benefits from this mechanism would require formal organization across the entire nation. Furthermore, residents would need some reason to join such a group. A neighborhood "homeland security" group is not likely to attract widespread participation without its own mechanisms. Here, again, incentives or coercion could be used. Compulsory membership to such groups, however, would be politically infeasible, at least on a nationwide level, so we will not even consider it here.

Incentives, on the other hand, may have some promise for developing functioning "federal" groups. For example, counties could divide residential areas into sufficiently small zones eligible for property tax breaks. These tax incentives would be calculated based on the level of compliance with particular homeland security requirements within that zone. On a voluntary basis, each zone might have a designated reporting representative who would serve to coordinate with neighbors in verifying stocked emergency kits, for example. If the zone achieved 80 percent compliance, each household in the zone might receive a corresponding decrease in tax rate. If the zones had small enough memberships, the homeland security enterprise might achieve two outcomes that are unlikely in large groups: (1) social incentives would become available and (2) some individuals would felt led to bear the entire cost themselves. Let us consider each outcome in turn.

First, if a neighborhood-sized group of four homeowners was presented such a system, the contributions of each neighbor would be perceptible to the others. Inaction by one would affect all four homeowners, and there is a significant potential for social pressure to be applied to that one. Olson considered such groups to be "twice blessed in that they have not only economic incentives, but also perhaps social incentives that lead their members to work toward the achievement of the collective goods."[181] Second, if that social pressure did not work, you would be more likely to have at least one homeowner who is willing to bear the entire cost for the nonparticipating homeowners.

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[181] Olson, *Logic of Collective Action*, 63.

For that matter, you may have multiple participators willing to share the cost for the non-participators in order to achieve the common interest, which, in this case, might not even be homeland security or preparedness, but a tax break. Regardless of motivation, such a mechanism has a greater likelihood of achieving a desired group-oriented homeland security action than with no such system at all. Most importantly, the mechanism of "federating" the very large group toward smaller "privileged" groups could remain completely voluntary.

The idea given was just one of hundreds of possibilities, again limited by imagination. The illustration here was intended primarily to suggest that such a mechanism as "federal" groups might be feasible and would have the promise of greatly increasing citizen engagement in homeland security missions. For such groups to be effective, however, they must be sufficiently small to achieve visibility of individual contributions to other members in the group and, ideally, to achieve at least one member who would be willing to bear the entire cost to achieve the group's objective. Of course, offering incentives to realize these small groups of individuals would require commitment of resources from the sponsoring agency—very likely the federal or state governments, ultimately.

C.   ISRAEL: LESSONS IN OVERCOMING THE FREE RIDER PROBLEM

Israel is well known for its high level of public involvement in security matters. It has been the target of hundreds of terrorist attacks over the past six decades, so the importance of its relatively small population taking an active role is readily apparent. However, to assume that this level of citizen engagement is the natural, sociological result of a high-threat environment would be naive. With a population in the millions and terrorist attack fatalities in the hundreds from 2000 to 2007, it would be rational for an Israeli citizen to reason that responsibility for his personal security could rest almost entirely on the backs of others.[182] Even in a place as dangerous as Israel, one can imagine an incentive to free ride. A likely reason free riding is not a problem in Israel, as

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[182] Charles Lenchner, "Statistics, Israel, Palestine," Change.org, http://humanrights.change.org/blog/view/statistics_israel_palestine (accessed June 10, 2010).

it is in the United States, is that a culture akin to the American-envisioned "Culture of Preparedness" already exists—and the Israeli government has played a direct role in making it a reality.

The purpose of this section is to examine the strategies used by Israel to encourage citizen involvement in homeland security and to seek applications from the Israeli model for use in the United States. Its secondary purpose is to attempt to validate the applicability of Olson's collective action theory—and the general solutions we derived—to a state that has been able to overcome the free rider problem. First, we will examine how citizen engagement is integral to the Israeli approach by considering the specific security practices used by Israeli citizens. Next, we will examine the mechanisms used by the Israeli government to leverage its citizens as full partners in homeland security. Finally, we will attempt to draw parallels from the Israeli approach to the general framework we have proposed for the United States. Our concern is not with extracting specific homeland security practices. The Israeli and American cases are much too different. Rather, the intent is to examine the institutional framework Israel has used to engage its citizens in homeland security. To the extent that each country is composed of millions of rational, self-interested individuals with a natural incentive to free ride, we consider such comparisons valid—for the principles of collective action are based on human nature.

1. Citizen Involvement

In Israel, homeland security is not just a task for the government: it is a way of life for the citizens. From a very early age, Israeli children are taught not only how to prepare for terrorist attacks, but that security is their *responsibility* as Israeli citizens. As they advance toward high school their homeland security education and training continue, so that by the time they are adults, security has become second nature. As adults, Israelis assume proactive roles in providing security within their communities as well as imparting a security mindset to successive generations.

a.   *Education and Training*

Homeland security education and training in Israel have been instituted for all age levels, but the greatest impact to the culture is likely achieved at the younger ages. In elementary school, Israeli children are taught about chemical and biological weapons, including how to use a gas mask.[183]   They also learn how to identify suspicious people and unusual situations.[184]   In fifth grade, students complete two solid days of "readiness and emergency preparedness" training.[185]   In high school, students in the two eldest classes serve as emergency response volunteers, providing direct assistance to responders in times of disaster.[186]   The importance of personal involvement is reinforced for children when they see their parents providing security at their school for a few days out of each year. By the age of eighteen, most Israeli citizens enter the Israeli army, which greatly enhances their security training. Developing a culture of security and preparedness is much more effective if it starts with the younger members of a society. Starting there, however, still requires the deliberate actions of security-minded adults.

b.   *Voluntarism*

Israel has not achieved its level of public involvement entirely through enforcement of education or other legislative measures. This is evidenced by the large number of volunteers who *choose* to get involved in homeland security. The most notable case of voluntarism is the Civil Guard. It was started in 1974 in response to terrorist attacks on civilians. The Civil Guard is a volunteer corps of civilians that was formed to assist Israeli police officials in administering internal security and, in particular, to help prevent residential terrorist attacks. The corps is established at the community level and is centered on neighborhood headquarters that "dispatch foot patrols, man checkpoints, inspect bus stations and markets, engage in traffic control, and

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[183] Siobhan Gorman, "Fear Factor," *National Journal* 35, no. 19 (May 10, 2003), 1462.

[184] Eli Lehrer, "Citizen Soldiers: What the U.S. can Learn from Israel about Fighting Terror," *The American Enterprise* 12, no. 8 (December 2001), 31.

[185] Conroy, "Move the Needle," 83.

[186] Ibid.

carry out guarding duties at schools."[187] This is not a small "fringe" movement either. Today the Civil Guard includes over 70,000 volunteers. In fact, it dwarfs the official police force. In Tel Aviv, late in 2001, there were over 8,000 uniformed volunteers and just over 3,000 full-time police officers.[188] These are civilian volunteers engaging in official security functions. They assist the police in "providing security and maintaining public order, preventing crime, and tending to weaker and more vulnerable populations, as well as helping to deal with social problems that are the primary responsibility of the police."[189] Their services have proved invaluable by (1) providing a capable local presence to respond swiftly to terrorist attacks and (2) helping the police with routine tasks, thereby freeing them for higher priority security duties. [190] With this level of voluntary engagement, one can begin to see that Israeli citizens are greater assets than liabilities.

c.   *Community Practices*

The most observable indicators of the Israeli "culture of preparedness" are the security practices that have become standard across Israeli communities. In every neighborhood there is a protective pit designed for citizens to deposit suspicious packages that might be bombs. Local hospitals maintain outdoor showers for use in the event of a chemical attack. Up-to-date information about evacuation routes and shelters is well publicized through a robust civil defense program. In settlements along the West Bank, the residents set up their own emergency response centers. A supervisor of one such center claimed, "Bulletproof vehicles aren't enough here. You need people to respond." Israeli citizens are well aware of the vital role their communities play in homeland security.[191]

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[187] Badi Hasisi, Geoffrey P. Alpert and Dan Flynn, "The Impacts of Policing Terrorism on Society: Lessons from Israel and the US," in *To Protect and to Serve: Policing in an Age of Terrorism*, eds. David Weisburd and others (New York: Springer, 2009), 191.

[188] Lehrer, "Citizen Soldiers," 31.

[189] Hasisi, Alpert, and Flynn, "Policing Terrorism," 191.

[190] Ibid.

[191] Lehrer, "Citizen Soldiers," 31.

d.   *Individual Preparedness*

Israeli preparedness is not just a community phenomenon. Israeli citizens are under no illusion that the government or the community will provide all the security they need. Individual responsibilities for self and family preparedness are taken seriously as well. For example, each home built since the first Gulf War is required to have a hardened room that is able to function as a family shelter in case of attack. One author provided this description of such a room:

> At a glance, the secure room in Uzi Landau's modest apartment near Tel Aviv looks like a typical study. A computer whirs quietly in one corner, and software manuals, spiritual texts, and books of political philosophy line the shelves. But a closer look tells a different story. A heavy steel plate is rolled over the window with a few tugs. The windows and steel door have gaskets which seal the room against biological and chemical attack. The walls, floor, and ceiling of the room are made of reinforced concrete. And government-distributed gas masks sit beside a manual for Windows 98.[192]

As was said in the beginning of this section, homeland security is not merely an idea to Israeli citizens, but an integral part of daily life—and it permeates society at the individual, community, and government levels.

e.   *Motivation*

Given the prevalence of terrorism, it would be reasonable to assume that fear is a primary motivator for Israeli citizens to get involved in their own security. Obviously, fear is a factor that cannot be ignored because Israel, as a democratic society, is unique in that respect. However, most visitors are quite surprised at just how "normal" life seems in this "terror-filled" environment. In early 2002, Israel had just ended one of its worst-ever years of terrorism: 233 attacks, including 35 suicide events.[193] It was near the peak of the Palestinian al-Aqsa intifada ("uprising"). Yet one United States-born mother and seven-year resident of Jerusalem had this to say about her way of life in Israel:

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[192] Lehrer, "Citizen Soldiers," 31.

[193] Hasisi, Alpert, and Flynn, "Policing Terrorism," 195.

I don't think of my home as a war zone … If the Israel of news accounts seems an embattled country, visitors here are invariably struck by the persistence of normalcy—open businesses, bustling streets, children in schools, parks full of people.

Yet beneath our adherence to routine lies a not-so-thinly-veiled anxiety, the result of terrorist attacks so frequent they themselves have come to seem almost routine. I can't say that I walk around feeling uptight all the time, but when I'm in a public space—especially downtown Jerusalem—I am intensely aware of every passerby. Suicide bombers often perform their deadly missions in disguise, dressed as Orthodox Jews or Israeli soldiers. Any man or woman carrying a lot of packages is suspect. When I leave a public place, something in my body relaxes. Only then do I realize how tense I have been, how wary of the crowd.[194]

It would seem the Israeli experience is better described by words like "anxiety" and "uneasiness" rather than "fear" or "terror." Preparedness and security are a way of life because terrorism is. Both are almost considered routine. From the woman's comments, one gets the sense that the constant threat of terrorism naturally motivates the Israeli citizen to be watchful, alert, and wary when out in public, but not at home. It is easy to see why this level of tension would create a strong incentive to learn about the threat, how to protect oneself and one's family from it, and how to respond in the event of an attack. It is not so clear, from a rational perspective, why it would motivate one to habitually put oneself at greater risk by taking a more active role to protect the community by providing security at a bus stop or joining the Citizen Guard. Even with the constant threat of terrorism, the free rider problem still has the potential to prevent widespread citizen engagement, but it does not. Thus, fear is not the only motivator for an Israeli citizen to get involved in her country's security.

It does seem likely that fear would motivate Israeli citizens to find their *own* ways to deal with the ever-present threat in their lives, but whether their ways would naturally contribute to the security of others in a significant way is doubtful. The government plays an important role in designing and organizing programs that leverage individual participation in order to enhance the overall security of the nation.

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[194] Wendy Senor Singer, "What It's Like to Live with Danger," *Redbook* 198, no. 1 (January 2002), 85.

2. Government Leverage

The Israeli government has gone to great lengths to incorporate every societal entity into homeland security, just as the U.S. Department of Homeland Security (DHS) seeks to engage its entire "enterprise." Unlike the United States, however, Israel has managed to rely on its citizens as the cornerstone of its homeland security efforts. Despite the multitude of counterterrorism measures it employs, the government understands "that savvy people—more than technology, or physical barriers, or special tactics—are the critical weapon they can wield against terrorists."[195] Indeed, participation of the public has proven to be vital: civilians foil more than 80 percent of the terrorist attacks attempted.[196] Much of this is owed to the hyper-alertness that the uneasiness of constant terrorism naturally produces. However, nervousness alone does not create an informed public that is (1) willing to bear the risks of living a "normal" life; (2) willing or able to take rational and effective actions in the face of danger; and (3) willing to incur additional personal risk for the sake of others. A well-reasoned and active approach on the part of the government has yielded these results.

Israel pursues direct engagement of its citizens in three specific elements of its counterterrorism policy: intelligence collection, chemical and biological attack defense, and efforts to strengthen the population's psychological endurance.[197] The government achieves their desired level of public participation through the combined use of (1) awareness, (2) education and training, (3) legal enforcement, and (4) incentives.

a. Awareness

Building and maintaining public awareness are critical to Israel's counterterrorism efforts. As proven by the record of foiled plots, civilian vigilance is a major component in preventing successful terrorist attacks. Israel leverages its discerning public by exposing them to public service announcements that further assist them in

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[195] Lehrer, "Citizen Soldiers," 31.

[196] Jonathan B. Tucker, "Strategies for Countering Terrorism: Lessons from the Israeli Experience," *Journal of Homeland Security* (March 2003), http://www.homelandsecurity.org/journal/Articles/tucker-israel.html (accessed May 7, 2010).

[197] Ibid.

identifying suspicious objects, vehicles, and people and, most importantly, that instruct them on what to do should they encounter such anomalies.[198] Government-sponsored television advisories remind people how to spot explosives in a public place.[199] The police post public notices titled "We Can Only Stop Terrorism Together," detailing how to identify a suicide bomber:

> He might be a young man (or woman) dressed inappropriately for the time of year—wearing a heavy jacket on a summer's day in order to conceal explosives, for example—or he may be carrying a bag or suitcase that might contain a bomb.[200]

The notice also suggests ways to recognize unusual behavior among terror suspects: "nervousness, fidgeting, sweating, and a tendency to avoid eye contact with security personnel." Other public displays provide specific instructions on how to respond to a terrorist attack: leave the area, seek protection, and stay clear of tall buildings, glass windows, and motor vehicles.[201] The government makes sure Israeli citizens are constantly exposed to threat information and appropriate responses to it. Its open sharing of information fosters trust and facilitates a partnership with the public. That trust and partnership are reflected in the public's willingness to report suspicious items or activities to the police, as well as in its willingness to work alongside the police in volunteer capacities.

b.   *Education and Training*

Israel realizes that awareness is important, but not enough to achieve the *coordinated* behavior needed to prevent and effectively respond to terrorism. Education and training are used for this purpose. For the most part, they are not optional. For school-age children, education serves two purposes: (1) to create the desired behavior and (2) to instill a culture of security. As children get older, education turns more toward training when high school adolescents gain practical experience as volunteers. Directly

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[198] Hasisi, Alpert, and Flynn, "Policing Terrorism," 182.

[199] Conroy, "Move the Needle," 83.

[200] Hasisi, Alpert, and Flynn, "Policing Terrorism," 182.

[201] Ibid.

following high school, three years of mandatory service in the army acts as the capstone to their school experience and then the transformation is complete. Israeli adults routinely rely on their military experience later in their private lives. Security-mindedness is ingrained; most citizens have acquired the knowledge and skills to recognize security threats, immediately notify appropriate authorities, as well as render assistance following terrorist attacks. Education and training are the foundation of Israeli citizen preparedness.

c. *Legal Enforcement*

Even with a strong security-minded culture, Israel employs legal mechanisms to achieve desired counterterrorism objectives. In this case, mandatory requirements are established not mainly for the purpose of compelling compliance, but in order to ensure standardization. Standardization helps to create order out of the chaos of terrorism. If all newer homes (since 1992) are required to have hardened, sealable safe rooms, not only do responders know exactly where to find residents following a chemical attack, they also know that their first priority is getting to the older homes without the rooms. Because the safe rooms must meet legal standards, responders are able to make reasonable assumptions about the safety of the occupants in newer homes. The result is a more efficient response and one that has the potential to save more (and risk fewer) lives. Even if the government required "safe rooms" but did not specify their design, emergency response would be no more efficient or effective than without the rooms, because no assumptions could be made. Legal enforcement has the effect of minimizing confusion in crises by achieving some level of predictability in what would otherwise be pandemonium. Because adequate levels of trust, cooperation, and like-mindedness exist between the government and its citizens, legal enforcement of homeland security requirements is not met with the same resentment or resistance as it might be elsewhere, such as in the United States.

d. *Incentives*

Although the government does not seem to rely a great deal on incentives as part of their program, incentives still exist for individuals to increase their involvement

in homeland security. In this case, incentives are not economic, or very often even tangible. Incentives are primarily social and are found in such things as the satisfaction of working as a nation, or the recognition and status of being an official member of an Israeli security organization, such as the Civil Guard. These types of incentives are achieved by designating responsibilities and providing volunteer opportunities as low as the neighborhood and public school levels.

Make no mistake: the Israeli system is not without its problems. Although the model is an excellent example of how a government can design methods to leverage its citizenry, Israel will never achieve 100 percent participation. In several cases, citizens have had the chance to assist in thwarting attacks, but have not, and it has been costly. Many such cases have involved minority Israeli Arabs who decided not to report information to the police because they feared being harmed if seen approaching from the sight of a terrorist attack, or they felt they needed to be 100 percent certain that their suspicions were correct before reporting.[202] In one case, an Arab student was warned by the suicide bomber on her bus to get off before the impending explosion. She and her friend got off the bus, but did not report the possible crime. Nine people were killed and dozens were injured in the attack. The girl's father defended her, explaining that she could not be certain of the man's intentions.[203] However, this does not mean that Israel has a problem enlisting the help of willing Arab citizens in the fight against terrorism. There are 7,000 Arab volunteer members of the Civil Guard—ten percent of the entire corps.[204] No system is flawless, but Israel's is about as close as one might get in terms of collaborating with the public in homeland security endeavors, especially within a democratic society.

3.   A Viable Framework for the United States?

At first glance, it might seem difficult to incorporate lessons from Israel into the American homeland security system because the countries are just so different from each

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[202] Hasisi, Alpert, and Flynn, "Policing Terrorism," 183.

[203] Ibid.

[204] Ibid., 191. Arab citizens make up approximately 20 percent of the Israeli population.

other. While both are considered liberal democracies, each country's citizens have very different levels of tolerance for government involvement in their personal lives. What Israelis would consider routine practices, Americans would consider invasive, alarmist, or even "fear-mongering:" performing frequent trunk inspections, stationing armed guards and metal detectors at shopping malls, and providing infant gas masks along with the formula and diapers as newborns leave the hospital.[205] Much of this difference is attributed to the other differences. Israel, in contrast to the United States, has an acute and persistent terrorist threat, is surrounded by adversaries on every side, and has a population and land area fractions the size of the United States. These differences are significant and prevent direct application of Israel's specific practices. However, Israel's basic framework for achieving citizen engagement still offers much to learn, which *can* be applied.

It is unlikely that the American public would be receptive to a massive corps of uniformed police volunteers or gas mask training for their first graders. What we can learn from Israel's prevalent civilian preparedness is not so much the substantive, or specific, security measures they employ, but the mechanisms used to garner the attention and support of the population. Israel has one distinct advantage in engaging its citizens that the United States may never have: the persistent, credible threat of terrorism that has had a significant effect in most citizens' lives … repeatedly. This perception of a real threat that is likely to have a very personal impact acts as a negative incentive to increase an individual's likelihood of taking appropriate preparedness actions. Furthermore, individuals have seen that the large group of individuals with a common interest in protection from terrorism will not always be able to protect them, so many of the actions they take are perceived to provide a noncollective benefit, one they *cannot* get from the group. Therefore, the government has had little problem enlisting direct public support in countering terrorism.

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[205] Singer, "What It's Like," 85.

However, this perception of the threat does not necessarily explain why citizens would take additional steps to that would put them in harm's way for the sake of strangers. Yet they do. There is still an incentive for individuals to free ride by taking care of themselves, their families, and perhaps their close friends while leaving the rest of population for "the group" to take care of. Furthermore, the persistent threat does not necessarily provide an incentive to conform one's security practices to the rest of society's for the sake of the group. Even with a common interest to protect one's fellow citizens from the effects of terrorism, there still exists a rational, self-interested tendency for individuals to maximize their own utility at the expense of the group. Israel overcomes this tendency, whether knowingly or unknowingly, by employing the mechanisms previously discussed.

a. *Incentives*

From this research, Israel does not appear to have an overt incentive structure to entice individuals to contribute to its security. Rather, it is able to rely on the terrorist threat to provide incentive and then supplements with other mechanisms. However, whether intentional or not, there are still incentives present within its framework, almost entirely of a social nature.

(1.) Youth Education and Training. Some might regard the youth education measures as coercive, but there are distinct social incentives inherent in them as well. At younger ages, there are positive incentives to do well in school endeavors, to be the best among peers, or to receive praise from teachers and parents. There may also be negative incentives associated with nonparticipation or lack of performance in the form of discipline, ridicule, or even corporal punishment, if used. However, at the elementary ages, directed behaviors would usually be considered voluntary until a child is openly defiant, belligerent, or unyielding. Incentives to perform the directed actions are typically effective enough at younger ages to preclude using more coercive means. Furthermore, school-age education and training capitalizes on a particularly receptive segment of the population that has not yet developed mindsets or habits that are difficult to overcome. An additional incentive is provided for parents to

get more involved as well, when their children are being taught relevant new skills that can be applied at home. In Israel, parents also provide their children an incentive to develop a security mindset by occasionally providing security at their schools, illustrating that some of the concepts and skills they are learning are actually applicable to their lives as adults.

The United States has begun to recognize the potential to encourage greater citizen participation by directing educational incentives to the younger population. The most recent *Citizen Preparedness Review* provided a useful literature review of worldwide youth preparedness efforts at the individual, school, and community levels.[206] Analysis of the literature led the writers to conclude that schools are an ideal place for children to learn preparedness skills, that youth education offers the benefit of continual reinforcement, and that youth education provides an opportunity for parents to get involved.[207]

(2.)   Volunteer Opportunities. Voluntarism provides significant social incentives for Israeli citizens to get involved in their country's security. Israel has achieved a remarkable level of participation in its all-volunteer Civil Guard and this would not be possible without such incentives. With the prevalent civilian involvement in this organization, it is very likely that most Israelis are well acquainted or even close friends with a member of the corps. The wider the participation, the more likely social incentives like prestige and social pressure are to exist because members of the larger group become aware of others' contributions, or lack thereof. Furthermore, most of the volunteer opportunities are centered on smaller groups, even down to the neighborhood level, further increasing the visibility of others' contributions to the group's collective good of security.

The United States has established several volunteer agencies, but they have not yet achieved a level of participation proportionate to the Israeli level. Thus, they are not yet a significant source of social incentives for most Americans. These volunteer opportunities are primarily centered at the community level, which may

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[206] Federal Emergency Management Agency, "Youth Preparedness," 4.

[207] Ibid., 8–12.

not provide the needed visibility of individual contributions to the larger group in order to encourage greater involvement. With the current structure of volunteer organizations, USAonWatch-Neighborhood Watch might have the greatest potential to do this based on the smaller size of its neighborhood-based groups.

(3.) Community Practices. Reminders of the threat and of citizen security responsibilities are so prevalent at the community level that there likely exist social pressures for citizens to understand and execute their roles even within this larger group. It might be quite embarrassing to pass countless instructional signs, neighbor "bomb" pits, chemical showers, and other security measures and indicators and be caught not understanding their intended purpose or proper use. There are similar social incentives in the United States to not be "made the fool" by revealing ignorance of traffic laws while driving in heavy traffic or being ridiculed for acting in a socially irresponsible way by tossing an empty drink in the middle of a crowded sidewalk. Even in a large group of strangers, there are social incentives for acting in a group-oriented way when individual actions or inactions are noticeable to other members of that group. This might be one way to use social incentives at the community level in the United States. Prevalent warnings, instructions, or "in case of …" advisories appropriate for the local threats might create local environments in which it is socially unacceptable to be ignorant of these measures.

While Israel may not use a structured incentive program, it still leverages social incentives to achieve an optimum level of citizen engagement and help defeat tendencies to free ride. In the absence of a persistent, credible threat and an established "culture" of preparedness to incentivize individuals, the United States might expect better results from an intentional, targeted economic incentive program similar to the ones used to achieve widespread citizen participation in "go green" efforts. The government has emplaced countless creative measures to incentivize individuals to act in environmentally responsible ways, including tax breaks, insurance discounts, and rebates and refunds for living in environmentally friendly houses, driving environmentally friendly vehicles, and disposing of recyclables and hazardous materials in environmentally friendly ways. Is homeland security any less important? Furthermore,

incentives have been able to rapidly achieve desired individual behaviors, on a voluntary basis, and without requiring a corresponding change in individual beliefs. Instead of waiting patiently for citizen engagement to emerge as part of a pervasive shift in "cultural" beliefs about homeland security, incentives can be used to nudge citizens into the desired behaviors now, and the culture may eventually follow.

b. *Coercion*

Coercive mechanisms are a prominent component of Israel's framework for achieving widespread individual behaviors for the sake of its collective security. While social incentives are mostly effective in youth education, one would expect that, when those incentives fail, coercion be used to the extent that society allows. This research did not reveal the level of coercion that Israel's public school system relies upon. In the United States, detentions and suspensions of students for repeated noncompliance would be mechanisms normally thought of as coercive. The fact that students are *required* to attend school is a coercive instrument. Once homeland security education and training were made part of the state-approved curricula, some level of coercion would be available in the public school systems for garnering citizen participation, and particularly for leveraging the younger population, where a desired culture is more likely to be sown.

Compulsory military service is arguably the greatest coercive contributor to homeland security for Israel. The knowledge and skills instilled through military training become almost second nature and are no doubt invaluable to everyday security preparedness once military service is complete. The application of this particular element to the United States framework seems entirely unlikely. The United States is not going to reinstitute the draft any time soon, and certainly not for the sake of achieving greater civilian preparedness. However, a similar notion of coercive training could be used while individuals are still subject to the public school system. Military-type training would not likely be socially acceptable or even necessary, but compulsory emergency response training might have a place in the United States for 17- and 18-year-olds in high school— especially if such training could be "eased into" the public school curricula. Citizen

Corps programs could be leveraged by requiring students to spend a week or two with one of its partner agencies such as going through CERT training, or being exposed to the Fire Corps, VIPS, or even the MRC.

Israel also uses coercion to achieve standardization. The most obvious example from this research is the mandatory "safe rooms" built to specifications in every new home. Coercion is the only effective mechanism for this purpose. The goal of standardization in this case is to achieve predictability in the midst of chaos. "Partial" standardization that might be obtained through incentives would not meet this goal. Where standardization is deemed critical to saving lives (or even to saving critical resources), the United States should incorporate coercive devices in order to get it. If beachfront homes along the Gulf Coast could be built in such a way to double their chances of withstanding a Category 3 hurricane, state governments could write these methods into building codes for vulnerable locations. Homeowners would foot the bill for more durable design, but by doing so might save the country millions of dollars in the long run. For areas that were assessed to be less critical, incentives could be offered for homeowners to build "disaster-resistant" homes. Actually, such a program is already under way. The recently established Resilient Home Program is intended to be analogous to existing environmental home-building programs such as Energy Star. Its goal, however, is "to develop and market a cost-effective national or regional (southeastern United States) certification program to ensure higher performance of buildings during natural disasters."[208] Findings from the study will be used to develop certification standards that can then either be incentivized or enforced in particular regions.

Coercion is a mainstay in the Israeli framework because so many citizen actions are critical to national resilience and even survival. The continuous terrorist threat demands that many behaviors be enforced. The prevalent threat is also the reason coercion is more acceptable to Israeli citizens. The level of national threat requires that some civil liberties be sacrificed for the sake of survival. In the United States, where

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[208] Community & Regional Resilience Institute, "Creating Resilient Communities: The Work of SERRI and CARRI" (information package, Oak Ridge National Laboratory), 10, http://www.resilientus .org/library/SERRI_CARRI_Information_Package_92109_1253565206.pdf (accessed December 1, 2010).

threats are not jeopardizing national security or survival to the same degree, coercion is less acceptable to the public and less necessary for security and resilience. In the case of vital interests, however, coercion is a necessary tool.

c. *"Federation"*

In addition to social incentives and coercive instruments, Israel also leverages Olson's principle of smaller "federal" groups to reduce the incentive for its citizens to free ride. Its primary mechanism for doing so is the Citizen Guard, which is organized around neighborhood headquarters. Neighborhood-based groups increase the likelihood that outstanding contributions, as well as nonparticipation, are noticed by members of the group, creating social incentives to contribute to the group's common interests. If the United States were able to establish a neighborhood-level focus with its Citizen Corps councils, or leverage economic incentives to increase participation in the existing Neighborhood Watch program, the likelihood of achieving social incentives would increase as well. It may even create enough marginal utility for some individuals to decide to bear additional costs in order to make up for free riding members of the group. Israel also employs the concept of federating the large group interest by having parents assist with security details at the public schools. An analogous concept for the United States might be to find ways for parents to participate occasionally in emergency drills at their children's schools. Achieving visibility of individual actions is key to establishing social incentives. "Federal" groups are one method for accomplishing this even with large groups.

V.   CONCLUSION

The United States recently unveiled a groundbreaking approach to national security. In the 2010 National Security Strategy, the Obama administration recognized a blurring distinction between national security and homeland security. In so doing, the new strategy not only acknowledged the importance of individual citizens to the collective national effort, but also, for the first time, named specific areas in which individual contributions would be vital. The Department of Homeland Security has embraced the strategy, at least on paper, and, appropriately, has identified roles intended specifically for individuals in four of its five core missions. More remarkably, the department has declared *the "highest calling" of the homeland security enterprise is to empower Americans to contribute directly to the nation's security.*[209] Homeland security experts outside of government have echoed this rhetoric, claiming that the government, in fact, has taken too long to adopt such an approach.

Even so, it is difficult to imagine national leaders saying anything less inspiring to its citizens, regardless of the real value that individual Americans add to the homeland security effort. The rhetoric itself does not prove their importance. However, a survey of past homeland security incidents have shown that individuals, indeed, *are* critical. In larger attacks and disasters, the efforts of private citizens may not always be decisive, but they will always have the potential to save lives. The passengers of United Flight 93 are just one example. Americans have displayed their potential to endure disasters and tragedies, to selflessly serve suffering victims, to foil terrorist attacks, and to work together to solve problems without waiting for prompting from officials. Likewise, Americans have shown the importance of their participation when they have *failed* to provide it, such as by neglecting to prepare for emergencies, as exhibited in the attacks of 9/11 and in Hurricane Katrina. *Direct engagement of individuals in homeland security missions is essential.*

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[209] U.S. Department of Homeland Security, *Quadrennial Homeland Security Review*, 69.

However, individuals have the potential to affect homeland security in ways that are *not* directly observable—ways that are often overlooked by officials. In short, they can not only *contribute* to homeland security, but also have the potential to *energize* the entire enterprise. Citizens engaged in homeland security can shape local policy by directly participating in its formulation, much the way citizen advisory councils guided urban renewal programs in the 1960s and 1970s. Beyond direct participation, *informed* citizens engaged in homeland security have the potential to strengthen all levels of homeland security policy through their elected representatives and through elections of those representatives. Therefore, **the homeland security enterprise should contribute to creating a politically informed, engaged citizenry by increasing awareness of policies, potential policies, and their impacts on citizens at the individual level**. As business leaders and employees, engaged individuals also have the potential to exert significant influence on the private sector to adopt better homeland security practices. Individual Americans' greatest influence, however, is likely to be on other individuals, especially those close to them. *Individual citizens have the unique capacity to invigorate the entire homeland security enterprise, but only if they are active within it.*

Research, however, reveals that American citizens are *not* active. Their potential to strengthen homeland security remains latent due to extensive nonparticipation, most notably when it comes to personal preparedness for "all hazards." The tragedies of 9/11 and Hurricane Katrina have done *nothing* to motivate Americans to act, and despite over seven years of aggressive awareness campaigns, community-based education and training, and countless volunteer opportunities, individuals have hardly moved. The lack of results suggests a new approach is needed, one that reconsiders the root cause of the population's immobilization. The federal government's focus on changing individual beliefs about the *personal* nature of homeland security threats is well intentioned, but ineffective. When 91 percent of Americans recognize the importance of preparing for emergencies, but only 58 percent have done anything about it, lack of awareness does not appear to be the problem.[210] Officials have acknowledged that the desired culture will take time and, indeed, already has. Meanwhile, they have also assessed that the citizenry

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[210] Federal Emergency Management Agency, "Weather Channel."

is stagnantly falling far short of what is required "to ensure a more resilient nation."[211] It follows, then, that *continuing* to wait for Americans to respond to the current efforts to *personalize* the threat—*thereby* motivating them to take action—may prove costly. We must find a way to achieve decisive results more quickly. **The homeland security enterprise must refocus *immediate* efforts from instilling "a culture" *eventually* to achieving the necessary individual behaviors *now*.** This will require framing the problem differently.

By applying the theory of collective action, as developed by Mancur Olson in 1965, we are able to analyze the problem citizen nonparticipation in a new way. Using Olson's theory as a framework, we assume the vast majority of American citizens (1) to be rational, self-interested individuals seeking to maximize their utility, or perceived benefits, and (2) to perceive that a personal benefit, or utility, is gained from homeland security. These assumptions allow us to identify a very large group of individuals (approximately 90 percent of Americans) defined by a common interest in homeland security. Olson's theory explains that such a group will be immobilized by each individual's incentive to free ride by allowing the group to provide the collective good (homeland security) without bearing any of the cost of providing it. Furthermore, this behavior is completely rational since any contribution made by the individual would be imperceptible to the group. Olson shows that such *a large group can only be mobilized when a "separate and selective incentive" is used to stimulate individuals to act in a group-oriented way.*[212] Such stimulation can be achieved through positive or negative incentives, through coercion, or by "federating" the large group into smaller groups and thereby creating social incentives and pressures for individuals to contribute to the group. While awareness will remain important, these mechanisms will "nudge" individuals to take action where "awareness" will not.

Olson's theory of collective action, therefore, gives us *three general solutions for mobilizing individuals to contribute to homeland security efforts: (1) incentives, (2) coercion, and (3) "federation."* Incentives are the most practical and politically palatable

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[211] U.S. President, "National Preparedness Month, 2009, Proclamation 8412," 46663.

[212] Olson, *Logic of Collective Action*, 51.

approach of the three, though not appropriate for every case. All three of these mechanisms have been successfully employed to engage Israeli citizens in their country's security, where, despite a prevalent terrorist threat, there still exists an incentive to free ride. Although most specific Israeli security practices are inapplicable to the United States based on vast differences between the two countries, the basic framework remains relevant and useful because it is based on *human nature*, rather than threats, demographics, geography, regional politics, or national culture. *The collective action framework and its general solutions show promise in eliciting immediate widespread behavior changes while waiting for the elusive "culture of preparedness" to emerge among American citizens.* **In order to swiftly achieve the desired level of citizen participation in homeland security, the homeland security enterprise must adopt a new strategy: overcome the free rider problem through the intentional and targeted use of (1) incentives, (2) coercion, and (3) "federal" groups.**

Incentives should target identified deficiencies in terms of both demographics and specific deficient behaviors. Unless a group is sufficiently small (sub-neighborhood level) or the "cultural" objective has been achieved, social incentives should not be expected to work as well as economic incentives. Economic incentives, on the other hand, will prove useful for any size group, as long as (1) the perceived personal gains from the incentive are *separate* from the personal gains provided by the group-oriented behavior itself; and (2) the incentive *selectively* rewards only those who contribute to the group objective (or punishes those who do not). Incentives can be tied—or *linked*—to currently existing programs, such as "go green" initiatives. They can also be combined with commonplace activities, such as renewing vehicle registration, buying a house, leasing an apartment, or shopping. Finally, incentives can be employed at any level of the enterprise and, for that matter, will be increase in effectiveness as they increase in prevalence. Therefore, the federal government should support and guide the use of incentives by all levels of government and by the private sector. In cases where security depends upon the widespread deliberate actions of individuals, **coercion** (legal enforcement) should be used to achieve the particular behavior. Where possible, the attempt should be made to **"federate"** large groups of individual Americans into very

small groups in order to reap the benefits of (1) social incentives and (2) individuals willing to bear the entire cost of providing the collective good for the group.

The United States' collective strength *hinges* on the participation of its citizens. However, we have *no* reliable reason to expect individual contributions toward homeland security goals without the proper mechanisms and institutions in place. Without "separate and selective" incentives to get citizens engaged, we will continue to measure the strength of the country in terms of potential, at the expense of national security and, thus, at the risk of the nation.

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